

### SUMMARY

This section discusses water service within the One Valley One Vision (OVOV) Planning Area. The OVOV Planning Area is composed of the City's Planning Area and the County's Planning Area. The City's Planning Area consists of its incorporated boundaries and adopted Sphere of Influence (SOI). The County's Planning Area consists of unincorporated land outside of the City's boundaries and the adopted SOI but within the OVOV Planning Area boundaries. In this Environmental Impact Report (EIR) water service section; water service is analyzed on a regional basis for the OVOV Planning Area based on the existing conditions in the Planning Area, and proposed buildout of the City's General Plan and the County's Area Plan. The OVOV Planning Area is also referred to in this section as the Santa Clarita Valley.

For the purposes of buildout under the proposed Plan, this analysis emphasizes water use over the next 40 years (2050). The proposed buildout of the OVOV Planning Area would generate a total water 2050 demand of 135,450 acre-feet per year (afy) with 10 percent water conservation within the Castaic Lake Water Agency (CLWA) service area and East Subbasin, plus another 6,000 afy outside the CLWA boundary and East Subbasin. Water demand would be served by local groundwater, recycled water, and State Water Project (SWP) and non-SWP imported water supplied by the Castaic Lake Water Agency (CLWA) and the other Santa Clarita Valley water purveyors. Portions of the County's Planning Area outside the service area of CLWA would be served by local groundwater supplied by private wells. Non-potable water demand would be supplemented with the use of recycled (reclaimed) water from the existing Valencia and Saugus Water Reclamation Plants (WRPs) and the approved (but unbuilt) Newhall Ranch WRP.

Potable water would be supplied from the existing groundwater resources, and other existing and planned water supplies of CLWA, including imported water from CLWA's SWP sources. The use of these water supplies is assessed in this EIR. Based on the information presented, an adequate supply of water would be available to serve the portion of the OVOV Planning Area within the CLWA service area boundary and the East Subbasin, and impacts would be less than significant. In areas outside the CLWA service area and the East Subbasin however, local groundwater supplies may not be adequate to meet the needs of all existing residents due to the apparent overreliance on the groundwater deposits as evidenced by declining water levels and dry wells. Consequently, local supplies would not be able to meet the needs of OVOV buildout in this area and impacts would be significant after mitigation.

Over the past several years, questions have been raised regarding the reliability of SWP water delivered by CLWA, the ability of local water purveyors to deliver an adequate and reliable supply of water to its customers, and the extent to which ammonium perchlorate discovered in local groundwater reduces the amount of local water available in the Valley. Provided below are answers to these questions, in non-technical terms.

### **Where does the OVOV Planning Area water come from (what are the supply sources)?**

The OVOV Planning Area lies mostly within the groundwater basin identified in Department of Water Resources (DWR) Bulletin 118 (2003 Update) as the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin) (see **Appendix 3.13**). The Basin is comprised of two aquifer systems, the Alluvium and the Saugus Formation. The Alluvium (also referred to as the Alluvial aquifer) generally underlies the Santa Clara River and its several tributaries, and the Saugus Formation underlies practically the entire Upper Santa Clara River area. The eastern portion of the Planning Area lies in between the East Subbasin on the west and the Acton Valley Groundwater Basin on the east. In this eastern portion of the Planning Area, groundwater is pumped from the Holocene alluvium and Pleistocene terrace deposits.

As discussed above, the projected total 2050 water demand is 135,450 afy with 10 percent water conservation within the CLWA service area and East Subbasin, plus another 6,000 afy outside the CLWA boundary and East Subbasin. Project water demand increases by approximately 10 percent in a dry year. Water sources expected to serve the OVOV Planning Area are local groundwater and CLWA's supplies of SWP and non-SWP imported water to meet the potable demand, and recycled water from the existing Valencia WRP and approved but unbuilt Newhall Ranch WRP to help supply non-potable demand. Groundwater is the primary source of water outside the CLWA service area.

### **How reliable are the water supply sources for the OVOV Planning Area?**

Both the Alluvial aquifer and the Saugus Formation can meet the groundwater demands for the portion of the Planning Area within the East Subbasin (Basin) under both short- and long-term conditions without creating any significant groundwater impacts. The groundwater component of the overall water supply in the Basin derives from a groundwater operating plan developed by CLWA and the local retail purveyors over the past 20 years to meet water requirements (municipal, agricultural, small domestic), while maintaining the Basin in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water). This operating plan also addresses groundwater contamination issues in the Basin. This operating plan is based on the concept that pumping can vary from year to year to allow increased groundwater use in dry periods and increased recharge during wet periods, and to collectively



assure that the Basin is adequately replenished through various wet/dry cycles. The operating yield for the Basin has been quantified as ranges of annual pumping volumes. The groundwater operating plan is further described below. The operating plan addresses both the Alluvial aquifer and the Saugus Formation.

Groundwater supplies within the Basin were evaluated in the 2005 Urban Water Management Plan, the 2005 Analysis of Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, Los Angeles County, California (2005 Basin Yield Report), and the 2009 Analysis of Groundwater Supplies and Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin (2009 Basin Yield Update). This evaluation resulted in the following findings: (1) both the Alluvial aquifer and the Saugus Formation are reasonable and sustainable sources of local water supplies at the yields stated in the 2005 Urban Water Management Plan (UWMP) over the next 25 years; (2) the yields are not overstated and will not deplete or “dry-up” the groundwater basin; and (3) there is no need to reduce the yields for purposes of planning, as shown in both the 2005 UWMP, the 2005 Basin Yield Report, and the 2009 Basin Yield Update (see **Appendix 3.13** for the 2005 UWMP, the 2005 Basin Yield Report, and the 2009 Basin Yield Update). In addition, both the 2005 UWMP and 2005 Basin Yield Report determined that neither the Alluvial aquifer nor the Saugus Formation is in an overdraft condition, or projected to become overdrafted.

### ***Alluvium***

As stated in the 2009 Santa Clarita Valley Water Report, May 2010 (2009 Water Report), and the 2005 Urban Water Management Plan (2005 UWMP; see **Appendix 3.13**), the operating plan for the Alluvial aquifer involves pumping from the Alluvial aquifer in a given year, based on local hydrologic conditions in the eastern Santa Clara River watershed. Pumping ranges between 30,000 and 40,000 afy during normal/average and above-normal rainfall years. However, due to hydrogeologic constraints in the eastern part of the Basin, pumping is reduced to between 30,000 and 35,000 afy during locally dry years.

### ***Saugus Formation***

As stated in the 2009 Water Report, the 2009 Basin Yield Update and the 2005 UWMP, pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the State Water Project (SWP). During average year conditions within the SWP system, Saugus pumping ranges between 7,500 and 15,000 afy. Planned dry-year pumping from the Saugus Formation ranges between 15,000 and 25,000 afy during a dry year and can increase to between 21,000 and 25,000 afy if SWP deliveries are reduced for two consecutive dry years and between 21,000 and 35,000 afy if SWP deliveries are reduced for three consecutive dry years. Such pumping would be followed by periods of

reduced (average-year) pumping, at rates between 7,500 and 15,000 afy, to further enhance the effectiveness of natural recharge processes that would recover water levels and groundwater storage volumes after the higher pumping during dry years.

**Groundwater outside the Basin is constrained, and unable to reliably meet the needs of all residents as evidenced by declining groundwater levels and dry wells. Does the OVOV Planning Area rely on State Water Project supplies?**

Yes. As indicated above, the portion of the OVOV Planning Area within the CLWA service area will use local groundwater, SWP and non-SWP imported water from CLWA, and recycled water from local water reclamation plants (WRPs). These water sources meet the water demands of the proposed buildout within the CLWA service area and East Subbasin, and potable water would be used or relied upon from CLWA's existing or planned supplies. This EIR summarizes CLWA's supplies available to the Basin as a whole.

The reliability of SWP water supplies varies depending upon several factors. The amount of water the Department of Water Resources (DWR) determines is available and allocates for delivery in a given year is based on that year's hydrologic conditions, the amount of water in storage in the SWP system, regulatory, environmental, operational constraints, levee vulnerability due to flooding and earthquakes, the SWP Contractors' requests for SWP supplies, and other factors. These factors can significantly alter and reduce the availability of SWP water in any given year.

CLWA is one of 29 water agencies (i.e., "SWP Contractors"), with a long-term SWP water supply contract with DWR. Each SWP contractor's SWP water supply contract contains a "Table A," which lists the maximum amount of water a contractor may request each year of the highest priority available under the SWP contract throughout the life of the contract. Currently, CLWA's annual Table A Amount is 95,200 acre-feet (af).<sup>1</sup> In an effort to assess the impacts of various conditions on SWP supply reliability, DWR released the *Final State Water Project Delivery Reliability Report*, August 2010 (2009 DWR Delivery Reliability Report). A copy of this report is incorporated into this EIR by reference and is available for public review on California's website at, <http://baydeltaoffice.water.ca.gov>. The report is an update to the *State Water Project Delivery Reliability Report*, 2007 issued as final in 2008. The report assists SWP Contractors in assessing the reliability of the SWP component of their overall supplies. The DWR

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<sup>1</sup> CLWA's original SWP water supply contract with DWR was amended in 1966 for a maximum annual Table A Amount of 41,500 af. In 1991, CLWA purchased 12,700 af of annual Table A Amount from a Kern County water district, and in 1999 purchased an additional 41,000 af of annual Table A Amount from another Kern County water district, for a current total annual Table A Amount of 95,200 af.

computer-based reliability projections have been applied to CLWA's maximum Table A Amount yields in tabular form in **Tables 3.13-11** through **3.13-14**, later in this document.<sup>2</sup> The results show that adequate water supplies are available to meet the potable and non-potable demands of the proposed General Plan and proposed Area Plan buildout in the Basin (generally the CLWA service area) without resulting in significant environmental impacts to the Santa Clara River, the local Basin, or downstream users in Ventura County.

### **What is the likelihood of perchlorate contamination of the OVOV Planning Area water sources?**

In summary, the approach used to investigate the potential capture of perchlorate-impacted groundwater by the new wells involved three sequential steps: identification of local and regional groundwater flow patterns in the Alluvium; application of a single layer groundwater flow model to examine the capture zone of the four-well "well field" under planned operating conditions; and interpretation of potential capture of perchlorate via examination of the well's theoretical independent capture zone relative to the known occurrence of perchlorate in the Alluvium. The latter step was subsequently augmented by considering other factors, such as the locations and magnitude of pumping between the new wells and the known occurrence of perchlorate, which affect the potential capture of perchlorate by the new wells. The groundwater supplies for buildout of the OVOV Planning Area are not considered to be at risk due to perchlorate contamination released from the former Whittaker-Bermite facility.<sup>3</sup>

### **Will either buildout of the OVOV Planning Area or perchlorate contamination result in overdrafting the local groundwater basin?**

It has been suggested that the amount of water available from local groundwater supplies is overstated and that the effects of perchlorate contamination are not adequately analyzed in the 2005 UWMP. This EIR contains an analysis of this issue, as does the 2005 UWMP. An important aspect of this work was the completion of the 2005 *Basin Yield Report* and 2009 *Basin Yield Update* (see this EIR, **Appendix 3.13** [2005 *Basin Yield Report* and 2009 *Basin Yield Update*]). The primary determinations made in that report are that, despite perchlorate contamination (1) both the Alluvial aquifer and the Saugus Formation are sustainable sources at the operational plan yields stated in the 2005 UWMP over the next 25 years; (2) the yields are not overstated and will not deplete or "dry up" the groundwater basin; and (3) there is no need to reduce

<sup>2</sup> Subsection CLWA Imported Water Supplies and Facilities of this Section include CLWA's SWP and non-SWP imported supplies for the Santa Clarita Valley (see **Tables 3.13-11** through **3.13-14**).

<sup>3</sup> See *Potential Capture of Perchlorate Contamination*, Valencia Water Company's Wells E14-E17, Prepared by Luhdorff and Scalmanini for the Valencia Water Company, dated April 26, 2006. This report is provided in **Appendix 3.13** of this EIR.

the yields shown in the 2005 UWMP. Additionally, the 2005 *Basin Yield Report* and 2009 *Basin Yield Update* concluded that neither the Alluvial aquifer nor the Saugus Formation is in an overdraft condition or projected to become overdrafted.

**Was a SB 610 Water Supply Assessment prepared for the OVOV Planning Area, and if so, what were the findings of that assessment?**

No. An SB 610 water supply assessment was not completed for the proposed buildout of the City's General Plan or for the buildout of the County's Area Plan (i.e., the OVOV Planning Area). Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912[a]) subject to the California Environmental Quality Act (CEQA). Most, if not all, General Plans and General Plan updates in the State of California are evaluated through the preparation of a Program EIR per the CEQA. A Program EIR can be characterized as more of a "big picture" environmental document that analyzes large-scale projects on a macro level, rather than at the micro level, which is what Project EIRs are used for. The Program EIR enables the City of Santa Clarita and the County of Los Angeles to examine the overall effects of the proposed course of action and to take steps to avoid unnecessary adverse environmental effects at the macro level.

**Do adequate and reliable water supplies exist in the OVOV Planning Area to serve the existing population during future average, dry and multiple dry years?**

In average years, dry years, and multiple-dry years, the data provided by CLWA and the local purveyors shows that adequate and reliable water supplies exist in the Basin (generally the CLWA service area) to serve the existing population during future average, dry, and multiple-dry years. (See EIR, **Tables 3.13-11 through 3.13-14**, below.) However, groundwater supplies outside the Basin (i.e., outside the CLWA service area and East Subbasin) are constrained as evidenced by declining groundwater levels and dry wells.

**Will adequate and reliable water supplies exist in the Basin (generally the CLWA service area and East Subbasin) to serve existing and future populations during average, dry and multiple dry years?**

Yes. In order to analyze the water impacts of the proposed General Plan and proposed Area Plan, the amount and location of growth expected to occur in the OVOV Planning Area was predicted. Two scenarios are assessed in this water analysis in order to meet CEQA requirements. The scenarios analyzed in this EIR are referred to as the "2050 Build-Out Scenario – Within CLWA Boundary" and the "2050 Build-Out Scenario – Outside CLWA Boundary." Under the first scenario, available supplies would exceed demand in average/normal years, a single-dry year, and multiple dry years through 2050.

Therefore, the proposed buildout of the City's General Plan and County's Area Plan would not contribute to any significant impacts on the Basin's water supplies.

**Does the proposed buildout of the City's General Plan and County's Area Plan cause significant cumulative impacts on water supplies in the Santa Clarita Valley?**

No. Because buildout of the City's General Plan and the County's Area Plan relies on local groundwater, imported SWP and non-SWP imported supplies, and recycled water to meet its potable and non-potable water demands, it would not contribute to any significant cumulative water impacts in the Santa Clarita Valley.

**Will adequate and reliable water supplies exist outside the Basin (generally outside the CLWA service boundary in areas without access to Basin water supplies) to serve existing and future populations during average, dry and multiple dry years?**

Unknown based on currently available information. As indicated above, to analyze the water impacts of the proposed General Plan and proposed Area Plan, the amount and location of growth expected to occur in the OVOV Planning Area was predicted. Two scenarios are assessed in this water analysis to meet CEQA requirements. The scenarios analyzed in this EIR are referred to as the "2050 Build-Out Scenario – Within CLWA Boundary" and the "2050 Build-Out Scenario – Outside CLWA Boundary." Under the second scenario, current supplies are constrained as evidenced by declining groundwater levels and dry wells. Depending on the location, available supplies may or may not exceed demand in average/normal years, a single-dry year, and multiple dry years through 2050. Therefore, buildout of the County's portion of the Planning Area would contribute to significant impacts on Planning Area water supplies outside the Basin (generally outside the CLWA service boundary). Mitigation is required to lessen significant impacts to groundwater supplies in this portion of the Planning Area. However, impacts would remain significant in this area after mitigation.

## EXISTING CONDITIONS

Water supply and demand in the Santa Clarita Valley is affected by existing conditions, including local climatic conditions, demographics in the region, existing topography and regional area geology and hydrology, surface water flows, effects of drought cycles both locally and regionally, and effects of urbanization in the valley. These local conditions are evaluated in several documents listed below. This list also identifies the documents that were used or relied upon in the preparation of this section.

The documents, some of which are referenced appendices, are incorporated by reference and are available for public inspection and review at CLWA (wholesale water agency) 27234 Bouquet Canyon Road, Santa Clarita, California 91350, or the Valencia Water Company (local retail water supplier), 24631

Avenue Rockefeller, Santa Clarita, California 91355. The documents referred to throughout this section were used in formulating an independent determination of the sufficiency of the identified water supplies to meet the proposed demands of the proposed buildout of the OVOV Planning Area.

- *2005 Urban Water Management Plan*, prepared for Castaic Lake Water Agency, CLWA Santa Clarita Water Division, Newhall County Water District, Valencia Water Company, Los Angeles County Waterworks District No. 36, prepared by Black & Veatch, Nancy Clemm, Kennedy Jenks Consultants, Jeff Lambert, Luhdorff & Scalmanini, Richard Slade and Associates, November 2005.
- *Data Document, Proposed 2008 Facility Capacity Fees*, Castaic Lake Water Agency, November 12, 2008 (2008 Data Document).
- *Analysis of Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, Los Angeles County, California*, prepared by CH2M HILL, in cooperation with Luhdorff & Scalmanini, in support of the August 2001 Memorandum of Understanding between the Upper Basin Water Purveyors and the United Water Conservation District August 2005 (2005 Basin Yield Report).
- *Analysis of Groundwater Supplies and Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin*, by Luhdorff & Scalmanini and GSI Water Solutions, Inc., August 2009 (2009 Basin Yield Update).
- *Santa Clarita Valley Water Report 2006*, prepared for CLWA, Los Angeles County Waterworks District No. 36, Santa Clarita Water Division, Newhall County Water District and Valencia Water Company by Luhdorff and Scalmanini, Consulting Engineers, May 2007.
- *Santa Clarita Valley Water Report 2007*, prepared for CLWA, Los Angeles County Waterworks District No. 36, Santa Clarita Water Division, Newhall County Water District and Valencia Water Company by Luhdorff and Scalmanini, Consulting Engineers, April 2008.
- *Santa Clarita Valley Water Report 2008*, prepared for CLWA, Los Angeles County Waterworks District No. 36, Santa Clarita Water Division, Newhall County Water District and Valencia Water Company by Luhdorff and Scalmanini, Consulting Engineers, April 2009.
- *2009 Santa Clarita Valley Water Report*, prepared for CLWA, Los Angeles County Waterworks District No. 36, Santa Clarita Water Division, Newhall County Water District and Valencia Water Company by Luhdorff and Scalmanini, Consulting Engineers, May 2010.
- *The Santa Clarita Valley 2007 Consumer Confidence Report*, prepared by CLWA, CLWA's Santa Clarita Water Division, Newhall County Water District, and Valencia Water Company, 2007.
- *The Santa Clarita Valley 2008 Water Quality Report*, prepared by CLWA, CLWA's Santa Clarita Water Division, Newhall County Water District, and Valencia Water Company, 2008.
- *The Santa Clarita Valley 2009 Water Quality Report*, prepared by CLWA, CLWA's Santa Clarita Water Division, Newhall County Water District, and Valencia Water Company, 2009.

- *The Santa Clarita Valley 2010 Water Quality Report*, prepared by CLWA, CLWA's Santa Clarita Water Division, Newhall County Water District, and Valencia Water Company, 2010.
- *2001 Update Report: Hydrogeologic Conditions in the Alluvial and Saugus Formation Aquifer Systems*, prepared for Santa Clarita Valley Water Purveyors by Richard C. Slade and Associates, LLC, July 2002 (Slade, 2002).
- *CLWA Capital Improvement Program* prepared by Kennedy/Jenks Consultants, 2003.
- *CLWA FY 2009/2010 Budget, Capital Improvement Program, Fiscal Year 2009/2010, Castaic Lake Water Agency, Adopted June 2008 and effective July 2009.*
- *Water Supply Reliability Plan Draft Report* prepared for CLWA by Kennedy/Jenks Consultants, September 2003.
- *Memorandum of Understanding* between Castaic Lake Water Agency and Newhall County Water District, September 2005.
- *Memorandum of Understanding* between the Santa Clara River Valley Upper Basin Water Purveyors and United Water Conservation District, August 2001.
- *Groundwater Management Plan - Santa Clara River Valley Groundwater Basin, East Subbasin*, prepared for CLWA by Luhdorff & Scalmanini Consulting Engineers, December 2003.
- *Regional Groundwater Flow Model for the Santa Clarita Valley: Model Development and Calibration*, prepared for Upper Basin Water Purveyors (CLWA, CLWA Santa Clarita Water Division, Newhall County Water District and Valencia Water Company) by CH2M HILL, April 2004.
- *Analysis of Perchlorate Containment in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California*, prepared for Upper Basin Water Purveyors in support of the Department of Health Services 97-005 Permit Application by CH2M HILL, December 2004.
- *Analysis of Near-Term Groundwater Capture Areas for Production Wells Located Near the Whittaker-Bermite Property (Santa Clarita, California)*, prepared for Upper Basin Water Purveyors in support of the amended 2000 UWMP by CH2M HILL, December 21, 2004.
- *Water Supply Contract Between the State of California Department of Water Resources and CLWA, 1963* (plus amendments, including the "Monterey Amendment," 1995, and Amendment No. 18, 1999, the transfer of 41,000 acre-feet of SWP supplies from Kern County Water Agency to CLWA).
- *2002 Semitropic Groundwater Storage Program and Point of Delivery Agreement* among the Department of Water Resources of the State of California, CLWA, and Kern County Water Agency.
- *2002 Draft Recycled Water Master Plan* prepared for CLWA by Kennedy/Jenks Consultants.

- *Draft Program Environmental Impact Report - Recycled Water Master Plan*, prepared for CLWA by Bon Terra Consulting, November 2006 (SCH No. 2005041138).
- *Final Program Environmental Impact Report - Recycled Water Master Plan*, prepared for CLWA by Bon Terra Consulting, March 2007 (SCH No. 2005041138).
- *Draft Environmental Impact Report – Supplemental Water Project Transfer of 41,000 acre-feet of State Water Project Table A Amount*, prepared for CLWA by Science Applications International Corporation, June 2004 (SCH No. 1998041127).
- *Final Environmental Impact Report – Supplemental Water Project Transfer of 41,000 acre-feet of State Water Project Table A Amount*, prepared for CLWA by Science Applications International Corporation, December 2004 (SCH No. 1998041127).
- *Draft Environmental Impact Report - Rosedale-Rio Bravo Water Storage District (RRBWSD) Water Banking and Exchange Program*, prepared for CLWA by Science Applications International Corporation, August 2005 (SCH No. 2005061157).
- *Final Environmental Impact Report - Rosedale-Rio Bravo Water Storage District (RRBWSD) Water Banking and Exchange Program*, prepared for CLWA by Science Applications International Corporation, October 2005 (SCH No. 2005061157).
- *Draft Environmental Impact Report - Castaic Lake Water Agency Water Acquisition from the Buena Vista Water Storage District and Rosedale-Rio Bravo Water Storage District Water Banking and Recovery Program*, prepared for CLWA by Science Applications International Corporation, June 2006 (SCH No. 2006021003).
- *Final Environmental Impact Report - Castaic Lake Water Agency Water Acquisition from the Buena Vista Water Storage District and Rosedale-Rio Bravo Water Storage District Water Banking and Recovery Program*, prepared for CLWA by Science Applications International Corporation, October 2006 (SCH No. 2006021003).
- California Environmental Protection Agency, State Water Resources Control Board, *Draft Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*, July 20, 2010.
- California Department of Water Resources, *California's Groundwater*, Bulletin 118, Santa Clara River Valley Groundwater Basin, Santa Clara River Valley East Subbasin, February, 2004.
- California Department of Water Resources, *Groundwater Basins in California*, Bulletin 118-80, January 1980.
- California Department of Water Resources, *The State Water Project Delivery Reliability Report*, 2002, May 2003.
- California Department of Water Resources, *The State Water Project Delivery Reliability Report*, 2005, Final, April 2006.



- California Department of Water Resources, Bulletin 132-06, Management of the California State Water Project, December 2007.
- California Department of Water Resources, *The State Water Project Delivery Reliability Report*, 2007, August 2008.
- California Department of Water Resources, *Final State Water Project Delivery Reliability Report*, 2009, August 2010.
- California Department of Water Resources, *California's Drought* and associated publications, <http://www.water.ca.gov/drought> (accessed, December 8, 2008).
- California Department of Water Resources, *Using Future Climate Projections to Support Water Resources Decision Making in California*, <http://www.energy.ca.gov/2009publications/CEC-500-2009-052/CEC-500-2009-052-D.PDF> (accessed, January 27, 2009).
- 2008 *Water Master Plan, Draft*, (Santa Clarita Water Division of the Castaic Lake Water Agency), Civiltec Engineering, Inc., May 19, 2008.
- CLWA Letter to Los Angeles County Department of Regional Planning, February 2008.
- Los Angeles County, *Additional CEQA Findings Regarding the Newhall Ranch Final Additional Analysis to the Partially Certified Final EIR for the Newhall Ranch Specific Plan and Water Reclamation Plant*. March 2003.
- *Mitigated Negative Declaration – Groundwater Containment, Treatment and Restoration Project*, prepared by Kennedy/Jenks Consultants for Castaic Lake Water Agency, September 2005.
- *Interim Remedial Action Plan*, to facilitate and restore pumping of groundwater from two Saugus Formation production wells impacted by perchlorate, prepared by Kennedy/Jenks Consultants for Castaic Lake Water Agency and approved by the Department of Toxic Substances Control, December 2005.
- *Impact and Response to Perchlorate Contamination, Valencia Water Company Well Q2*, prepared by Luhdorff & Scalmanini Consulting Engineers, April 2005.
- *Analysis of Perchlorate Containment in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California*, prepared by CH2MHill for the Upper Basin Water Purveyors in Support of the Department of Health Services 97-005 Permit Application, December 2004 and UWMP.
- *Newhall Ranch Revised Additional Analysis*, Volume VIII (Final Revised Text, Figures and Tables), prepared by Impact Sciences Inc., for Los Angeles County, May 2003.
- Nickel Water contract and environmental documentation (see, *Newhall Ranch Revised Draft Additional Analysis*, Volume II, prepared by Impact Sciences, Inc., for Los Angeles County, November 2002, Appendix 2.5(b), (c)).

- Technical Memorandum: *Potential Effects of Climate Change on Groundwater Supplies for the Newhall Ranch Specific Plan, Santa Clarita Valley, California*, prepared by GSI Water Solutions, Inc. (John Porcello), March 18, 2008.
- Summary Report to Department of Toxic Substances Control from AMEC Geomatrix regarding Former Whittaker-Bermite Facility, Santa Clarita, California, November 17, 2008.
- Statewide Drought Press Release and Executive Order S-06-08, June 4, 2008.
- State of Emergency – Water Shortage, Proclamation by the Governor of the State of California, February 27, 2009.
- Progress Letter Report from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, September 15, 2009.
- Letter from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, June 8, 2009.
- CLWA News Release, September 14, 2009.
- Progress Letter Report from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, September 15, 2009.
- CLWA Memorandum from Brian J. Folsom to CLWA Board of Directors, October 1, 2009.
- 2009 laboratory test water well results.
- USFWS, 2008 Delta Smelt Biological Opinion, December 15, 2008.
- NMFS, 2009 Chinook Salmon/Sturgeon Biological Opinion, June 4, 2009.
- Acton-Agua Dulce Conceptual Master Plan for Water Facilities, prepared by Psomas for the Los Angeles County Department of Public Works, September 2, 2004.
- *2008 Urban Water Management Plan*, Antelope Valley-East Kern Water Agency, California, 2008.
- *California's Groundwater Bulletin 118*, Hydrologic Region South Coast, Acton Valley Water Basin, California Department of Water Resources, February 27, 2004.
- *Assessment of Hydrogeologic Conditions Within Alluvial and Stream Terrace Deposits, Acton Area, Los Angeles County*, prepared by R.C. Slade, for the Los Angeles County Department of Public Works and ASL Consulting Engineers, October 1990.

Please refer to the above-referenced documents for pertinent water supply assessment information.

## Water Agencies in the Santa Clarita Valley

Imported SWP supplies from CLWA are needed to meet the potable water demands of the portion of the OVOV Planning Area within CLWA's service area, including the City's potable water demands. The entire OVOV Planning Area will also rely on local groundwater, Nickel water (water secured under contract with the Nickel Family LLC in Kern County), non-SWP imported supplies, and recycled water from local WRPs to meet its potable and non-potable water demands. Local supplies that are readily available in a majority of the Planning Area include the local groundwater basin, contracts (e.g., Semitropic Groundwater B water, Nickel water), and existing and approved WRPs. Because imported SWP supplies are relied upon within the Planning Area, the following discussion of imported water supplies from CLWA is presented in this EIR for information purposes. Water for the portions of the Planning Area outside the CLWA service area is provided by private groundwater wells.

### *Wholesale Water Providers*

#### **Castaic Lake Water Agency**

CLWA, a wholesale public water agency, was formed in 1962 through passage of the "Castaic Lake Water Agency Law."<sup>4</sup> At that time, CLWA's purpose was contracting with State of California, through DWR, to acquire and distribute SWP water to its retail water purveyors. The retail purveyors are Santa Clarita Water Division (SCWD), Los Angeles County Waterworks District No. 36, Newhall County Water District (NCWD), and Valencia Water Company (VWC).

Since 1962, subsequent legislation broadened CLWA's purpose, which now includes, but is not limited to, the following: (1) Acquire water from the state; (2) Distribute such water wholesale through a transmission system to be acquired or constructed by CLWA; (3) Reclaim (recycle) water; (4) Sell water at retail within certain boundaries; and (5) Exercise other related powers.

The CLWA service area comprises approximately 195 square miles (124,800 acres) in Los Angeles and Ventura counties. CLWA serves the incorporated and unincorporated areas in, or adjacent to, the Santa Clarita Valley. Most of this area, including the incorporated cities, is within the geographic boundaries of Los Angeles County, but it also extends into a small portion of eastern Ventura County. The service area includes largely urban areas, such as the City of Santa Clarita, other smaller communities, and rural areas. The West Branch of the California Aqueduct terminates at Castaic Lake, in the northern portion of the service area. **Figure 3.13-1, Castaic Lake Water Agency Service Area**, depicts the CLWA service area.

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<sup>4</sup> See California Water Code Appendix Section 103-1, 103-15.

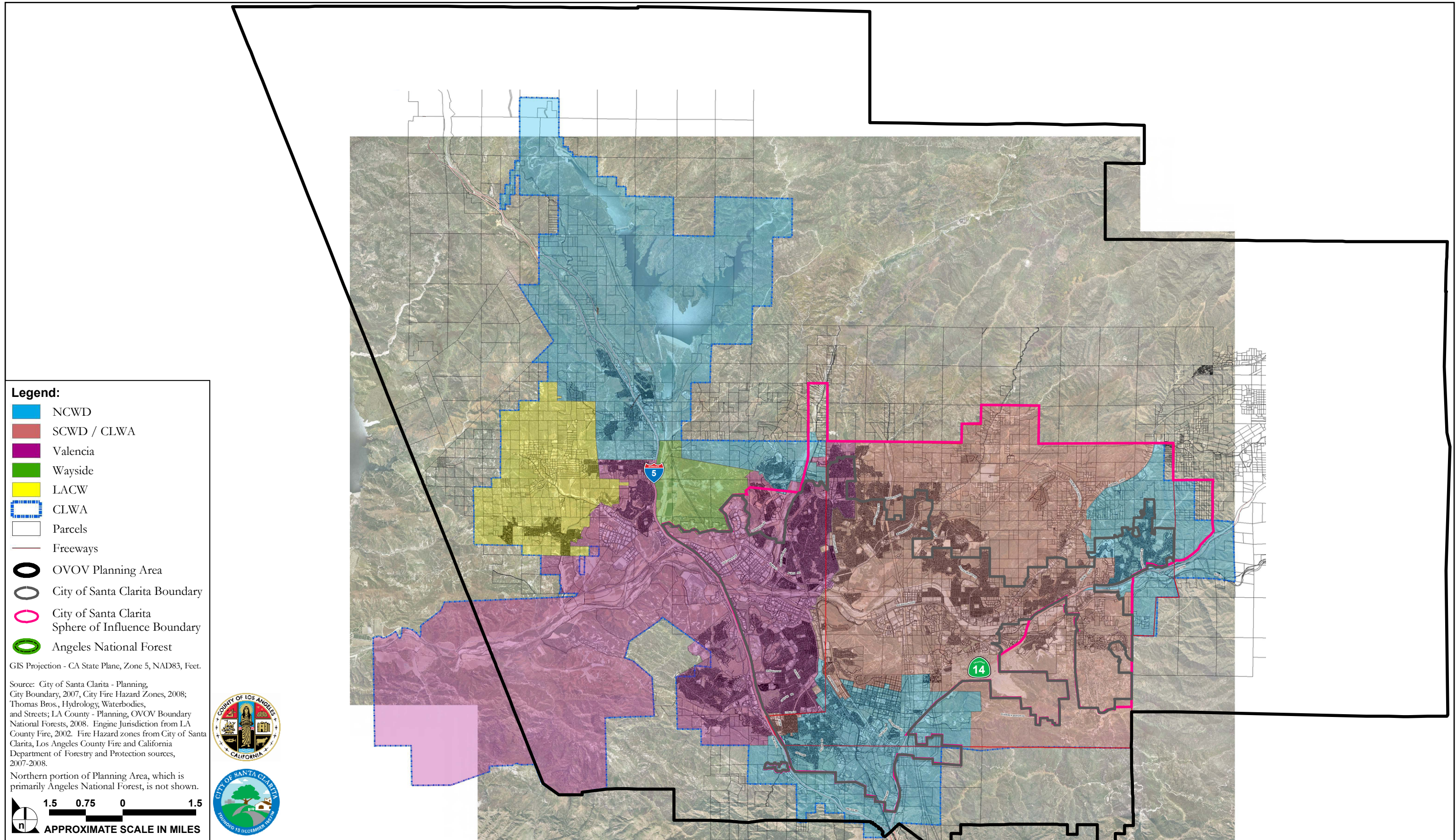
Adequate planning for, and the procurement of, a reliable water supply is a fundamental function of the CLWA and the local retail purveyors. CLWA obtains its water supply for wholesale purposes principally from the SWP and has a water supply contract with DWR for 95,200 af of SWP Table A Amount. (As discussed below, CLWA maintains other non-SWP imported supplies, including water from Buena Vista-Rosedale [11,000 afy] and Yuba County Water Agency water transfer [850 af in critically dry years].)

“Table A” is a term used in SWP water supply contracts. The “Table A Amount” is the annual maximum amount of water to which a SWP Contractor has a contract right to request delivery, and is specified in Table A of each SWP Contractor’s water supply contract. The Table A Amount is not equivalent to actual deliveries of water in any given year, and the water actually available for delivery in any given year may be an amount *less* than the SWP Contractor’s Table A Amount, depending upon hydrologic conditions, the amount of water in storage, the operational constraints, requirements imposed by regulatory agencies to meet environmental water needs, the amount of water requested by other SWP Contractors, climatic conditions, and other factors.

As stated, CLWA has an annual SWP Table A Amount of 95,200 af through its water supply contract with DWR. This Table A Amount is a maximum and does not reflect the actual amount of water available to CLWA from the SWP, which varies from year to year as described above.

As background, CLWA’s original SWP water supply contract with DWR was amended in 1966 for a maximum annual Table A Amount of 41,500 af. In 1991, CLWA purchased an additional 12,700 af of annual Table A Amount from the Devil’s Den Water District in Kern County. In March 1999, CLWA purchased another 41,000 af of annual Table A Amount from the Wheeler Ridge-Maricopa Water Storage District by way of an amendment to its water supply contract.





SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2008

FIGURE 3.13-1

Castaic Lake Water Agency Service Area



The amended water supply contract between CLWA and DWR is found in Draft EIR **Appendix 3.13**.<sup>5</sup>

In early 2007, CLWA finalized a Water Acquisition Agreement with the Buena Vista Water Storage District (Buena Vista) and the Rosedale-Rio Bravo Water Storage District (Rosedale-Rio Bravo) in Kern

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<sup>5</sup> CLWA prepared an EIR to address the environmental consequences of the 1999 41,000 af transfer. The EIR for the 41,000 af transfer was the subject of litigation in Los Angeles County Superior Court (*Friends of the Santa Clara River v. Castaic Lake Water Agency* (Los Angeles County Superior Court, Case No. BS056954). CLWA prevailed in the litigation at the trial court; however, the project opponent (Friends of the Santa Clara River) filed an appeal. In January 2002, the Court of Appeal issued a decision ordering the trial court to decertify the EIR for the 41,000 af transfer agreement on the grounds that it had tiered from another EIR that had been subsequently decertified in other litigation. In doing so, however, the Court of Appeal also examined all of the petitioner's other arguments, found them to be without merit, and held that, if the tiering problem had not arisen, it would have affirmed the earlier trial court judgment upholding the EIR. (See, **Appendix 3.13** [*Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, 1387.]).

The Court of Appeal did not invalidate any portion of the completed 41,000 af transfer agreement. Instead, the Court of Appeal directed the trial court to vacate certification of the EIR, and to retain jurisdiction until CLWA corrected the tiering technicality by preparing a new EIR. (See, **Appendix 3.13** [*Friends of the Santa Clara River*, 95 Cal.App.4th at p. 1388.]).

In October 2002, the Los Angeles County Superior Court refused to prohibit CLWA from using the 41,000 af of Table A water while a new EIR was being prepared. (See, **Appendix 3.13** [Judgment Granting Peremptory Writ of Mandate, *Friends of the Santa Clara River v. Castaic Lake Water Agency*, Case No. BS056954, filed October 25, 2002.]). The trial court decision on remand was appealed by Friends of the Santa Clara River in January 2003. On December 1, 2003, the appellate court denied any relief to Friends and affirmed the trial court's ruling. (See, **Appendix 3.13** [Appellate court decision, *Friends of the Santa Clara River v. Castaic Lake Water Agency*, Court of Appeal, Second Appellate District, Division Four, Appellate No. B164027.]).

CLWA's revised EIR was subsequently certified by the CLWA Board of Directors on December 23, 2004. On January 24, 2005, separate lawsuits challenging the EIR for this same project were filed by California Water Impact Network and Planning and Conservation League in the Ventura County Superior Court. These cases were consolidated and transferred to Los Angeles County Superior Court. On May 22, 2007, after a hearing, the trial court issued a final Statement of Decision, which included a determination that the 41,000 afy transfer is valid and cannot be terminated or unwound. The trial court, however, also found one defect in the 2004 EIR and ordered CLWA to correct the defect and report back to the court. The defect did not relate to the environmental conclusions reached in the 2004 EIR; rather, CLWA is required to better establish the basis for selecting three alternative scenarios covered in the 2004 EIR. As a result, the trial court entered Judgment against CLWA and another writ of mandate issued directing CLWA set aside its certification of the 2004 EIR. (See, **Appendix 3.13** [Statement of Decision, *California Water Network v. Castaic Lake Water Agency*, Los Angeles County Superior Court No. BS098724, filed April 2, 2007 ("Chalfant Decision.")].) The writ, however, specifically stated that it did not call for CLWA to set aside the 41,000 afy transfer. In July 2007, the petitioners appealed the trial court's decision and judgment, and cross-appeals were filed by CLWA and other parties. This appeal was resolved in favor of CLWA on December 17, 2009. On that date, the Court of Appeal, Second District, reversed an earlier trial court decision, and determined CLWA's new EIR adequately analyzed all of the 41,000 afy water transfer's potential significant environmental impacts and that the document fully complied with the California Environmental Quality Act (CEQA). (*Planning and Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, rehearing denied on January 14, 2010.) Therefore, the 41,000 afy water transfer is now supported by a certified Final EIR that has been upheld in a published appellate court decision. On January 26, 2010, PCL and CWIN filed a petition for review with the California Supreme Court. On March 10, 2010, the California Supreme Court (En Banc) denied the petitioners' petition for review and their request to depublish the Court of Appeal decision.

County. Under this Program, Buena Vista's high flow Kern River entitlements (and other acquired waters that may become available) are captured and recharged within Rosedale-Rio Bravo's service area on an ongoing basis. CLWA will receive 11,000 af of these supplies annually either through an exchange of Buena Vista's and Rosedale-Rio Bravo's SWP supplies or through direct delivery of water to the California Aqueduct *via* the Cross Valley Canal.<sup>6</sup>

Additional non-SWP imported water supply also is available to CLWA in critically dry years as a result of DWR entering into agreements with the Yuba County Water Agency (YCWA) and the Bureau of Reclamation (Reclamation) related to settlement of water rights issues on the Lower Yuba River (Yuba Accord). Additional supplies also could be available to CLWA in wetter years. The quantity of water would vary depending upon hydrology and the extent of participation by other SWP contractors. For purposes of analysis, however, and based on CLWA entering into a water transfer agreement with YCWA, CLWA has projected that approximately 850 af of water would be available to CLWA under the Yuba Accord in a critically dry year. (For a summary of the existing and planned water supplies available for the CLWA service area, please refer to **Tables 3.13-11** and **3.13-14**, below.)

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<sup>6</sup> In November 2006, a petition for writ of mandate was filed by California Water Impact Network, seeking to set aside CLWA's certification of the EIR for the Water Acquisition Agreement Project with Buena Vista and Rosedale-Rio Bravo. (*California Water Impact Network, et al. v. Castaic Lake Water Agency, et al.*, Los Angeles County Superior Court No. BS106546.) The petition was later amended to add Friends of the Santa Clara River (Friends) as a petitioner. In November 2007, the trial court filed its Statement of Decision finding that in certifying the EIR and approving the project, CLWA proceeded in a manner required by law, and that its actions were supported by substantial evidence. Judgment was entered in favor of CLWA in December 2007. Petitioners filed a notice of appeal on January 31, 2008. On April 20, 2009, the appellate court ruled in CLWA's favor and this water purchase is now considered final and it remains appropriate to list the 11,000 afy as one of CLWA's permanent water supply sources. (Please refer to **Appendix 3.13**, for the recent appellate court decision in *California Water Impact Network, Inc. v. Castaic Lake Water Agency*, Second Appellate District, Division Five, Appellate Case No. B205622.)

CLWA and the local retail purveyors have evaluated the long-term water needs (water demand) within its service area based on applicable county and city plans and has compared these needs against existing and potential water supplies. In addition, the 2005 UWMP was prepared by CLWA and the local retail purveyors to address water supply and demand forecasts for the CLWA service area (over a 25-year horizon [2005-2030]).<sup>7</sup> CLWA estimated future water demands, retail district-by-retail district. These demand projections are presented in the report entitled, *Data Document, Proposed 2008 Facility Capacity Fees*, Castaic Lake Water Agency, November 12, 2008 (2008 Data Document). Although information in the 2005 UWMP and the 2008 Data Document was considered, this EIR does not rely solely on that information, and an independent analysis and determination of water-related impacts was carried out in this EIR for the proposed OVOV Planning Area.

### **Antelope Valley-East Kern Water Agency**

A very small portion of the OVOV Planning Area is within the service area of the Antelope Valley-East Kern Water Agency (AVEK). AVEK provides service to incorporated and unincorporated areas of Antelope Valley. However, AVEK does not, and is not expected to provide water to any portion of the Planning Area. The following summary from the AVEK 2008 UWMP is provided for information purposes.

The Antelope Valley (which is completely outside the OVOV Planning Area) is located in the western part of the Mojave Desert, about 50 miles northeast of Los Angeles. The valley is triangular shaped, topographically closed basin covering about 2,200 square miles. Groundwater is an important component

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<sup>7</sup> On February 25, 2006, a lawsuit challenging the 2005 UWMP was filed by California Water Impact Network and Friends of the Santa Clara River alleging that the plan violated the UWMP Act because it overstated availability of local groundwater and SWP supplies and it will allegedly facilitate unsustainable urban development resulting in harm to the Santa Clara River and its habitat (*California Water Impact Network, et al. v. Castaic Lake Water Agency, et al.*, Los Angeles County Superior Court No. BS103295). CLWA and other named parties opposed the litigation challenge. On August 3, 2007, after a hearing, the trial court rejected the litigation challenge to the 2005 UWMP. In that decision, the trial court concluded that substantial evidence supported the determination that the 41,000 afy transfer “remains a valid and reliable water source.” Relying upon the evidence presented in the 2005 UWMP and record, the trial court identified the following evidence supporting the validity of the transfer: (a) it was completed in 1999 and DWR has allocated and annually delivered the water in accordance with the completed transfer; (b) the Court of Appeal held that the only defect in the 1999 CLWA EIR was that it tiered from the Monterey Agreement EIR, which was later decertified, and that defect was remedied by CLWA’s preparation of the 2004 EIR that did not tier from the Monterey Agreement EIR; (c) the Monterey Settlement Agreement expressly authorizes operation of the SWP in accordance with the Monterey Amendments, which facilitated the 41,000 afy transfer; (d) Courts of Appeal have refused to enjoin the 41,000 afy transfer; and (e) the DWR/CLWA contract encompassing the transfer remains in full force and effect, and no court has ever questioned the validity of the contract, or enjoined the use of this portion of CLWA’s SWP Table A supplies. The trial court decision was the subject of an appeal; however, the parties have settled and the appeal was dismissed in October 2008. Thus, the 2005 UWMP remains valid and is no longer subject to any litigation.



of water supply in the Antelope Valley. Increased urban growth in the 1980s resulted in an increase in the demand for water and an increase in groundwater use. Long-term groundwater withdrawals have caused some land subsidence.

AVEK has played a major role in the Valley's water system since it was granted a charter by the state legislature in 1959. In 1962 the AVEK Board of Directors signed a water supply contract with the State Department of Water Resources (DWR) to assure delivery of imported water to supplement Antelope Valley groundwater supplies. AVEK has the third largest allotment of 29 State Water Project (SWP) water agencies in California, following the Metropolitan Water District and the Kern County Water Agency. Financed by a \$71 million bond issue, AVEK constructed the Domestic Agricultural Water Network (DAWN), which consists of four water treatment plants with clear water storage and more than 100 miles of pipelines. Four 8-million gallon water storage reservoirs near Mojave and one 3-million gallon reservoir at Vincent Hill Summit complete the DAWN network. The bulk of the imported water is treated and distributed to customers throughout its service area. The network also provides delivery of untreated water from the Aqueduct to local farmers and ranchers. The Quartz Hill water treatment plant is capable of producing 90 million gallons per day (mgd) of treated aqueduct water. The Eastside water treatment plant is capable of producing 10 mgd. The Rosamond water treatment plant can produce 14 mgd while the most recently added treatment plant in Acton can make 4 mgd of treated water. Lancaster and Palmdale are the largest cities in the Antelope Valley with Mojave, Edwards Air Force Base, Boron, and Littlerock being the larger of the fewer than 10,000 population centers.

### ***Retail Water Purveyors***

Four retail water purveyors provide water service to most residents of the Santa Clarita Valley. A description of the service areas of the Planning Area retail purveyors is provided below.

The Los Angeles County Waterworks District #36 service area encompasses approximately 7,635 acres and includes the Hasley Canyon area and the unincorporated community of Val Verde. The District obtains its water supply from CLWA and from local groundwater.

The Newhall County Water District (NCWD) service area includes portions of the City of Santa Clarita and unincorporated portions of Los Angeles County in the communities of Newhall, Canyon Country, Saugus, and Castaic. The District supplies water from local groundwater and CLWA imported water.

CLWA Santa Clarita Water Division (SCWD) service area includes portions of the City of Santa Clarita and unincorporated portions of Los Angeles County in the communities of Canyon Country, Newhall, and Saugus. SCWD supplies water from local groundwater and CLWA imported water.

The Valencia Water Company (VWC) service area includes a portion of the City of Santa Clarita and unincorporated portions of Los Angeles County in the communities of Castaic, Stevenson Ranch, Valencia, and a portion of Newhall Ranch. Valencia Water Company supplies water from local groundwater, CLWA imported water, and recycled water.

A very small portion of the OVOV Planning Area is within the service area boundary of The Los Angeles County Waterworks District #37. However, District #37 does not, and is not expected to provide water to land uses within the Planning Area. The source for water in this portion of the Planning Area is groundwater from privately owned groundwater wells.

As of 2009, the Santa Clarita Valley retail water purveyors served approximately 69,700 connections in the Santa Clarita Valley. The specific breakdown by purveyor is provided in **Table 3.13-1, Retail Water Service Connections**.

**Table 3.13-1**  
**Retail Water Service Connections**

<b>Retail Water Purveyor</b>	<b>Connections</b>
CLWA Santa Clarita Water Division (SCWD)	28,700
Los Angeles County Waterworks District #36	1,400
Newhall County Water District (NCWD)	9,600
Valencia Water Company	30,000
<b>Total</b>	<b>69,700</b>

*Source: 2009 Santa Clarita Valley Water Report, May 2010 (see **Appendix 3.13**).*

## Water Supplies – Historic and Existing Uses

The *2009 Water Report* and *2005 UWMP* (see, **Appendix 3.13**) contain useful local and regional water demand, supply, and reliability planning information, particularly in the context of the perchlorate contamination detected in municipal-supply wells in the local Basin. In addition, the *2005 Basin Yield Report* and *2009 Basin Yield Update* confirm that the CLWA/purveyor groundwater operating plan for the local groundwater basin in Santa Clarita Valley will not cause detrimental short or long-term effects to the groundwater and surface water resources in the valley and, therefore, the local groundwater basin is sustainable.

### *Description of Groundwater Supplies*

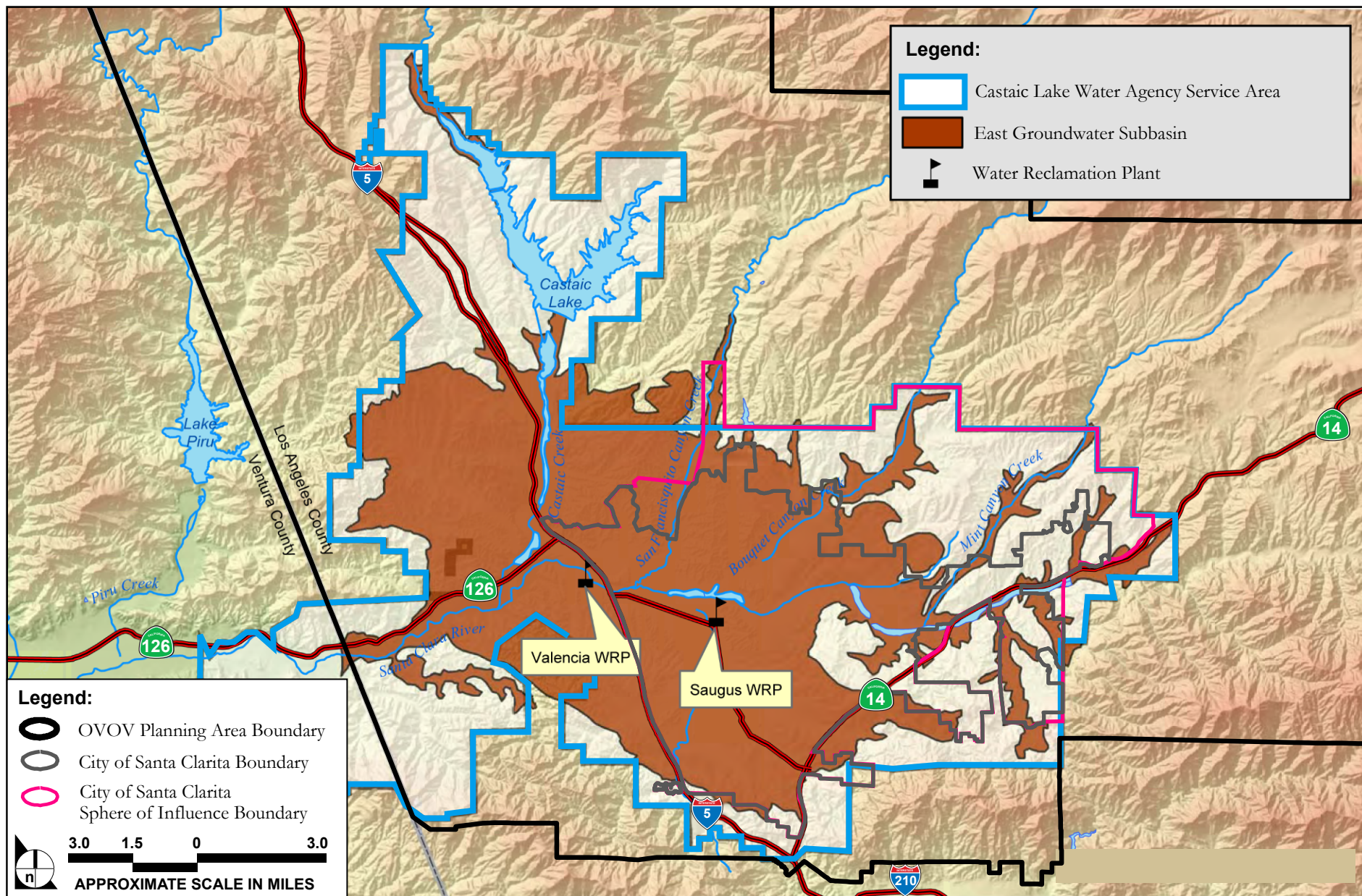
This section focuses on the available local groundwater supplies in the Santa Clarita Valley, including a summary of both the adopted Groundwater Management Plan for the local Basin and the 2009 *Basin Yield Update*.

#### **The Upper Santa Clara River Hydrologic Area**

The Upper Santa Clara River Hydrologic Area, as defined by DWR, is located almost entirely in northwestern Los Angeles County. The area, as shown in **Figure 3.13-2, Santa Clara Valley East Groundwater Basin – East Subbasin**, encompasses about 654 square miles comprised of flat valley land (about 6 percent of the total area), and hills and mountains (about 94 percent of the total area) that border the Valley area. The mountains include the Santa Susana and San Gabriel Mountains to the south and the Sierra Pelona and Leibre-Sawmill Mountains to the north. Elevations range from about 800 feet on the Valley floor to about 6,500 feet in the San Gabriel Mountains. The headwaters of the Santa Clara River are at an elevation of about 3,200 feet at the divide separating this hydrologic area from the Mojave Desert.

The Santa Clara River and its tributaries flow intermittently from Lang Station westward about 35 miles to Blue Cut, just west of the Los Angeles County/Ventura County line, where the River is the outlet from the Upper Santa Clara River Hydrologic Area. The principal tributaries of the Santa Clara River in the Santa Clarita Valley are Castaic Creek, San Francisquito Creek, Bouquet Creek, and the South Fork of the Santa Clara River. In addition to tributary inflow, the Santa Clara River receives treated wastewater discharge from the existing Saugus and Valencia Water Reclamation Plants (WRPs), which are operated by the Santa Clarita Valley Sanitation District.

The Santa Clara River Valley East Groundwater Subbasin, beneath the Santa Clarita Valley in the Upper Santa Clara River Hydrologic Area (**Figure 3.13-3**), is the source of essentially all local groundwater used for water supply in the Santa Clarita Valley. Below Blue Cut, the Santa Clara River continues westward through Ventura County to its mouth near Oxnard. Along that route, the River traverses all or parts of six groundwater basins in Ventura County (Piru, Fillmore, Santa Paula, Oxnard Forebay, Oxnard Plain, and Mound). The very eastern portion of the Planning Area lies generally in between the Santa Clara River Valley East Groundwater Subbasin and the Acton Valley Groundwater Basin, described below. The source of water for the portion of the Planning Area east of the Santa Clara River Valley East Groundwater Subbasin is groundwater accessed through private wells.



SOURCE: Luhdorff & Scalmanini Consulting Engineers – January 2006

FIGURE 3.13-2

Santa Clara River Valley East Groundwater Basin – East Subbasin





FIGURE 3.13-3

Upper Santa Clara River Hydrologic Area



There are two primary precipitation gauges in the Planning Area, the Newhall-Soledad 32c gauge and the NCWD gauge. The National Climatic Data Center (NCDC) and Los Angeles County Department of Public Works (LACDPW) have maintained records for the Newhall-Soledad 32c gauge since 1931. The NCWD has maintained records for the NCWD gauge since 1979. The cumulative records from these two gauges correlate very closely, with the NCWD gauge recording approximately 25 percent more precipitation than the Newhall-Soledad 32c gauge. This is likely due to the location of the NCWD gauge, which is at the base of the mountains rimming the southern edge of the Santa Clarita Valley. The Planning Area is characterized as having an arid climate. Historically, intermittent periods of below-average precipitation have typically been followed by periods of above-average precipitation in a cyclical pattern, with each wetter or drier period typically lasting from one to five years. The longer-term precipitation records for the Newhall-Soledad 32c gauge are illustrated in 2009 Water Report Figure 1-3. Long-term average precipitation at that gauge is 17.9 inches (1931–2009). 2009 Water Report Figure 1-3 also shows the cumulative departure from mean annual precipitation. In general, periods of below average precipitation have been longer and more moderate than 1-5 periods of above average precipitation. Recently, the periods from 1971 to 1976, 1984 to 1991 and 1999 to 2003 have been drier than average; the periods from 1977 to 1983 and 1992 to 1996 have been wetter than average. More recently, wet conditions that began in late 2004, continued into early 2005, ultimately resulting in about 37 inches of measured precipitation, or slightly more than 200 percent of long-term average precipitation, in that year. Those significantly wet conditions contributed to substantial groundwater recharge and decreased water demand that year. Subsequently, total precipitation in 2006 and 2007 was slightly to significantly lower, 14 inches and 6 inches respectively, but water requirements in both years were still close to those projected in the 2005 UWMP, and there were no dramatic changes in groundwater conditions. With the exception of the average annual rainfall total in 2008, the dry conditions that began in 2006 have persisted through 2009. 2009 was a below-average year, with 11.6 inches of precipitation. However, water demand in 2009 was below that projected for average conditions in the 2005 UWMP, and below the short-term projection in the 2008 Water Report. Early year precipitation in 2010 was approximately 13.4 inches through April, or close to long-term average for that part of the year, but water use further decreased from last year for the same period. Combined with other water supply considerations, discussed in 2009 Water Report Chapter 4, those conditions are expected to result in 2010 water requirements being slightly lower than water use in 2009.

### **Santa Clara River Valley Groundwater Basin - East Subbasin**

The majority of the Planning Area lies within the groundwater basin identified in DWR Bulletin 118 (2003 Update) as the Santa Clara River Valley Groundwater Basin, East Subbasin (Basin). The Basin is comprised of two aquifer systems, the Alluvium and the Saugus Formation. The Alluvium (also referred

to as the Alluvial aquifer) generally underlies the Santa Clara River and its several tributaries, and the Saugus Formation underlies practically the entire Upper Santa Clara River area. There are also some scattered outcrops of terrace deposits in the Basin that likely contain limited amounts of groundwater. Since these deposits are located in limited areas situated at elevations above the regional water table and are also of limited thickness, they are of no practical significance as aquifers and, consequently, have not been developed for any significant water supply. **Figure 3.13-2**, illustrates the mapped extent of the Santa Clara River Valley East Subbasin, which approximately coincides with the outer extent of the Alluvium and Saugus Formation. The CLWA service area and the location of the two existing water reclamation plants in the Valley also are shown on **Figure 3.13-3**.

### Acton Valley Groundwater Basin <sup>8</sup>

Information regarding the Acton Valley Groundwater Basin is presented to assist in providing a characterization of portion of the Planning Area that is between the Acton Valley on the east and the Santa Clara River Valley Groundwater Basin, East Subbasin, to the west within the Planning Area. No detailed information exists regarding the hydrogeologic character of the land area located between these two groundwater basins.

The Acton Valley Groundwater Basin is located east of the Planning Area, and includes the community of Acton and a portion of the community of Agua Dulce. This basin is 8,270 acres in size and is bounded by the Sierra Pelona on the north and the San Gabriel Mountains on the south, east, and west. The valley is drained by the Santa Clara River. Average annual precipitation ranges from 10 to 16 inches. Groundwater in the basin is unconfined and found in alluvium and stream terrace deposits. Holocene age alluvium consists of unconsolidated, poorly bedded, poorly sorted to sorted sand, gravel, silt, and clay with some cobbles and boulders. It is thickest in the channel of the Santa Clara River, thinning both east and west of the community of Acton. It attains a maximum thickness of 225 feet near Acton (Slade 1990; DWR 1993). Pleistocene age terrace deposits consist of crudely stratified, poorly consolidated, only locally cemented, angular to subangular detritus of local origin. They can be found on the low-lying flanks of the foothills and upper reaches of the Santa Clara River tributaries. Terrace deposits attain a maximum thickness of 210 feet north of Acton (Slade 1990).

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<sup>8</sup> Information regarding the Acton Valley Groundwater Basin was derived from two documents, including *California's Groundwater Bulletin 118*, Hydrologic Region South Coast, Acton Valley Water Basin, California Department of Water Resources, February 27, 2004, and the *Assessment of Hydrogeologic Conditions Within Alluvial and Stream Terrace Deposits, Acton Area, Los Angeles County*, prepared by R.C. Slade, for the Los Angeles County Department of Public Works and ASL Consulting Engineers, October 1990.

Underlying the potentially water-bearing sediments, and exposed within the hills and mountains adjacent to Soledad Canyon, are a series of cemented sedimentary rocks, volcanic rocks, and/or crystalline or metamorphic rocks. The geologically older rocks are considered to be bedrock, and they may contain groundwater generally only along bedding planes, fractures, shears, or joints. Their permeability is low and they are not considered capable of readily yielding water on a sustained basis to wells.

The principal geologic structures in the basin are the northwest-trending Kashmere Valley and Acton faults and the northeast-trending Soledad fault system. However, these faults are not barriers to flow in the alluvium (DWR 1993). The basin is recharged from deep percolation of precipitation on the valley floor and runoff in the Santa Clara River and its tributaries. The basin is also recharged by subsurface inflow, deep percolation of irrigation returns and returns from private subsurface sewage disposal systems (Slade 1990; DWR 1993). Outflow or discharge from the alluvium and terrace deposits occurs by water well extractions, subsurface outflow to the downstream Eastern Groundwater Basin to the west, surface outflow from the area of rising water within the alluvium located downstream of the Acton Camp, subsurface outflow, depending on water levels, to the permeable or fractured portions of the Vasquez Formation and older crystalline or metamorphic rocks that underlie the alluvium and/or terrace deposits; and evapotranspiration in areas of phreatophytes that grow in the downstream reaches of the main river valley where rising water is known to occur.

Hydrographs show a general decline in groundwater levels during the 1950s through the mid-1970s (Slade 1990). Water levels generally rose during the late 1970s through the mid-1980s, but then began declining thereafter (Slade 1990). Groundwater flows toward the channel of the Santa Clara River and then westward. The total storage capacity is estimated at 40,000 af (DWR 1975). The estimated amount of groundwater in storage ranges from a low of 14,900 af during November 1964 through December 1965 to a high of 34,400 af during November 1983 through May 1984 (Slade 1990). Natural recharge is estimated at 650 afy (DWR 1975). The total average annual natural recharge was estimated to be about 5,600 to 7,200 af for a watershed of 55,600 acres (Slade 1990). The average annual natural recharge has also been estimated at 11,100 af (Geraghty & Miller, Inc. in Slade 1990). A previous report considered subsurface outflow to be minimal or nonexistent (DWR 1968). However another report estimated subsurface outflow from the alluvium to range between 2,800 afy for a relatively wet period to about 1,200 afy for a relatively dry period (Slade 1990). Groundwater extractions by major producers for municipal use in 1989 are assumed to total about 1,520 af and an additional 20 af were pumped for irrigation (Slade 1990). Groundwater levels in the terrace deposits lying along the foothills of the western San Gabriel Mountains, south of the Santa Clara River, are considerably higher during dry periods than are groundwater levels in the terrace deposits along the foothills of the Sierra Pelona, to the north of the Santa Clara River. Isohyetal



contours prepared for the 1897 to 1947 period for the entire Santa Clara River drainage system (CRWQCB, 1975) show a maximum rainfall zone (32 inches per year) over the western San Gabriel Mountains, which decreases markedly to approximately 10 to 12 inches per year along the course of the river and to 8 to 10 inches per year in the northern part of the Acton area. This large rainfall decrease is considered to account for the relatively low groundwater levels during dry periods in the northern part of the Acton area (Slade 1990).

### ***Adopted Groundwater Management Plan – CLWA Service Area***

In 2001, as part of legislation authorizing CLWA to provide retail water service to individual municipal customers, Assembly Bill (AB) 134 included a requirement that CLWA prepare a groundwater management plan in accordance with the provisions of Water Code Section 10753.

CLWA adopted the Groundwater Management Plan (GWMP) on December 10, 2003.<sup>9</sup> The GWMP contains four management objectives, or goals, for the Basin, including (1) development of an integrated surface water, groundwater and recycled water supply to meet existing and projected demands for municipal, agricultural and other water uses; (2) assessment of Basin conditions to determine a range of operational yield values that use local groundwater conjunctively with supplemental SWP supplies and recycled water to avoid groundwater overdraft; (3) preservation of groundwater quality, and active characterization and resolution of groundwater contamination problems, including perchlorate; and (4) preservation of interrelated surface water resources, which includes managing groundwater in a manner that does not adversely impact surface and groundwater discharges or quality to downstream basins.

Prior to preparation and adoption of the GWMP, a local Memorandum of Understanding (MOU) process among CLWA, the purveyors, and United Water Conservation District (UWCD) in neighboring Ventura County had produced the beginning of local groundwater management, now embodied in the GWMP. In 2001, those agencies prepared and executed the MOU (see **Appendix 3.13** [MOU]). The MOU is a collaborative and integrated approach to several of the aspects of water resource management included in the GWMP. UWCD manages surface water and groundwater resources in seven groundwater basins, all located in Ventura County, downstream of the Basin. As a result of the MOU, the cooperating agencies have undertaken the following measures: (1) Integrated their database management efforts; (2) Developed and utilized a numerical groundwater flow model for analysis of groundwater basin yield

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<sup>9</sup> CLWA's Groundwater Management Plan, adopted December 10, 2003, is found in **Appendix 3.13** of this EIR.

and containment of groundwater contamination; and (3) Continued to monitor and report on the status of Basin conditions, as well as on geologic and hydrologic aspects of the overall stream-aquifer system.

The adopted GWMP includes 14 elements intended to accomplish the Basin management objectives listed above. In summary, the plan elements include

- monitoring of groundwater levels, quality, production and subsidence;
- monitoring and management of surface water flows and quality;
- determination of Basin yield and avoidance of overdraft;
- development of regular and dry-year emergency water supply;
- continuation of conjunctive use operations;
- long-term salinity management;
- integration of recycled water;
- identification and mitigation of soil and groundwater contamination, including involvement with other local agencies in investigation, cleanup, and closure;
- development and continuation of local, state and federal agency relationships;
- groundwater management reports;
- continuation of public education and water conservation programs;
- identification and management of recharge areas and wellhead protection areas;
- identification of well construction, abandonment, and destruction policies; and
- provisions to update the groundwater management plan.

Work on a number of the GWMP elements had been ongoing for some time prior to adoption of the GWMP. This work continues on an ongoing basis. An important aspect of this work was completion of the 2005 *Basin Yield Report* and the 2009 *Basin Yield Update* (see **Appendix 3.13** [2005 *Basin Yield Report* and 2009 *Basin Yield Update*]). The primary determinations made in those reports are that (1) both the Alluvial aquifer and the Saugus Formation are sustainable sources at the operational plan yields stated in the 2005 *UWMP* over the next 25 years, (2) the yields are not overstated and will not deplete or “dry up” the groundwater basin, and (3) there is no need to reduce the yields shown in the 2005 *UWMP*. Additionally, the 2005 *Basin Yield Report* and the 2009 *Basin Yield Update* (described below) conclude that neither the Alluvial aquifer nor the Saugus Formation is in an overdraft condition, or projected to become overdrafted.

### ***2009 Basin Yield Update (Upper Santa Clara River Groundwater Basin, East Subbasin)***

In April 2009, the purveyors<sup>10</sup> in Santa Clarita Valley determined that an updated analysis was needed to further assess groundwater development potential and possible augmentation of the groundwater operating plan, partly in preparation for the next UWMP in 2010, and in part because of recent events that are expected to impact the future reliability of the principal supplemental water supply for Santa Clarita Valley (i.e., from the State Water Project). The document entitled, *Analysis of Groundwater Supplies and Groundwater Basin Yield Upper Santa Clara River Groundwater Basin, East Subbasin* was published in August 2009 (2009 Basin Yield Update) and is included in Draft EIR **Appendix 3.13** along with its appendix material and references. A summary of that report is provided below.

The primary objective of the updated analysis of groundwater basin yield in the Santa Clarita Valley was to evaluate the planned utilization of groundwater by the Santa Clarita Valley purveyors, while considering potential impacts on traditional supplemental water supplies from the State Water Project, and recognizing ongoing pumping by others for agricultural and other private water supply. This objective also included the sustainability of the groundwater resources and the physical ability to extract groundwater at desired rates. As previously used in this basin, and consistent with groundwater management in other settings, sustainability is defined in terms of renewability (recharge) of groundwater as reflected by the following indicators:

- Lack of chronic, or sustained, depletion of groundwater storage, as indicated by projected groundwater levels, over a reasonable range of wet, normal, and dry hydrologic conditions
- Maintenance of surface water flows in the western portion of the basin (which are partially maintained by groundwater discharge) and surface water outflow to downstream basins over the same range of hydrologic conditions

Regarding maintenance of surface water flows, although the development and use of groundwater in a sustainable manner necessitates the inducement of recharge from surface water, sustainability in this case does not rely on inducing groundwater recharge by eliminating surface water flows. Rather, sustainability retains surface water outflows and may even increase them with the importation of SWP water when contrasted to pre-SWP conditions. Regarding both indicators of sustainability, the range of analyzed hydrologic conditions is a long-term period that includes anticipated occurrences of the types of years and groups of year types that have historically occurred in the basin.

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<sup>10</sup> The Santa Clarita Valley purveyors are comprised of Los Angeles County Waterworks District 36, Newhall County Water District, Santa Clarita Water Division of the Castaic Lake Water Agency (formerly Santa Clarita Water Company, acquired by CLWA in 1999), and Valencia Water Company.

A second objective of the *2009 Basin Yield Update* was to investigate and describe potential impacts of expected climate change on the groundwater basin and its yield. A third objective was to consider potential augmentation of basin yield via potential artificial groundwater recharge using storm water runoff in selected areas of the basin as planned by the Los Angeles County Flood Control District.

The *2009 Basin Yield Update* analyzed, with the numerical groundwater flow model for the basin, two groundwater operating plans: (1) a 2008 Operating Plan to reflect currently envisioned pumping rates and distribution throughout the Valley, including fluctuations through wet/normal and dry years, to achieve a desired amount of water supply that, in combination with anticipated supplemental water supplies, can meet existing and projected water requirements in the Valley; (2) Potential Operating Plan that envisions potentially increased utilization of groundwater during both wet/normal and dry years. The 2008 Operating Plan is presented and addressed in this EIR because it is relied upon to determine the sustainability of the basin groundwater in meeting the future needs of the proposed project, the Newhall Ranch Specific Plan, and other future land uses.<sup>11</sup>

Based on the *2009 Basin Yield Update*, the 2008 Operating Plan will not cause detrimental short- or long-term effects to the groundwater and surface water resources in the Valley; and, therefore, is sustainable. Consistent with actual operating experience and empirical observations of historical basin response to groundwater pumping, the 2008 Operating Plan can be expected to have local difficulty, in the Alluvium at the eastern end of the basin during locally dry periods, with achievement of all the Alluvial pumping in the 2008 Operating Plan. This condition is particularly evident if several decades of predominantly below-normal rainfall years were to occur in the future such as occurred during much of the five decades from the mid-1920s through the mid-1970s. In other words, while the basin as a whole can sustain the pumping encompassed in the 2008 Operating Plan, local conditions in the Alluvium in the eastern end of the basin can be expected to repeat historical groundwater level declines during dry periods, necessitating a reduction in desired Alluvial aquifer pumping due to decreased well yield and associated actual pumping capacity. The modeling analysis conducted to date suggests that those reductions in pumping from the Alluvial aquifer can be made up by an equivalent amount of increased pumping in other parts of the basin without disrupting basinwide sustainability or local pumping capacity in those other areas. For the Saugus Formation, the modeling analysis indicates that this aquifer can sustain the pumping from this unit that is encompassed in the 2008 Operating Plan.

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<sup>11</sup> It should be noted that the Potential Operating Plan is not part of the water supply and demand analysis presented in this EIR because it is not relied upon to determine the sustainability of the basin groundwater in meeting the future needs of the proposed project, the Newhall Ranch Specific Plan, and other future land uses.

Simulation of the 2008 Operating Plan with pumping redistribution indicates that westerly redistribution of 1,600 afy of Alluvial pumping from the eastern end of the basin would help, but not eliminate, the lack of achievability. The residual unachievable pumping in the east end of the basin, about 4,500 afy, could be redistributed to other areas of the basin with minimal impact on groundwater levels. In this case, total Alluvial pumping in the basin could remain near the upper end of the 2008 Operating Plan range of 30,000 to 35,000 afy. Conversely, absent any additional efforts to redistribute pumping, the total Alluvial pumping capacity during extended dry periods would likely fall toward the lower end of the 2008 Operating Plan range (toward 30,000 afy). The 2009 Basin Yield Update also assessed the runoff conservation/groundwater recharge projects planned by the Los Angeles County Flood Control District, and determined that the projects are unlikely to provide any substantial recharge that does not already occur in the basin. Additionally, the 2009 Basin Yield Update concluded that these proposed projects are mostly located in areas of the basin where the Alluvial aquifer is of insufficient thickness and storage (and, thus is not developed for water supply), or where the Alluvial aquifer already fully recharges when stream flows are naturally present.

The 2009 Basin Yield Update also assessed potential impacts of climate change on the yield of the basin and the related groundwater supply from the basin. While future conditions cannot be projected with any degree of certainty, the results of simulating basin response to the 2008 Operating Plan, under a range of potential climate change trends give rise to two observations:

- For the broad range of climate change possibilities that was analyzed, the 2008 Operating Plan would appear to be both sustainable and, with the same physical constraints to full pumping in the eastern part of the basin as have otherwise been experienced, achievable through the shorter term horizon associated with UWMP planning.
- The range of potential climate change impacts extends from a possible wet trend to a possible dry trend over the long term. The trends that range from an approximate continuation of historical average precipitation, to something wetter than that, would appear to result in continued sustainability of the 2008 Operating Plan, again with intermittent constraints on full pumping in the eastern part of the basin. The potential long-term dry trend arising out of climate change would be expected to decrease local recharge to the point that lower and declining groundwater levels would render the 2008 Operating Plan unsustainable.

### ***Available Groundwater Supplies – CLWA Service Area***

#### **Groundwater Operating Plan**

Based on the 2009 Water Report (May 2010), the groundwater component of overall water supply in the Santa Clarita Valley derives from a groundwater operating plan developed by CLWA and the local retail purveyors over the past 20 years to meet water requirements (municipal, agricultural, small domestic),

while maintaining the Basin in a sustainable condition (i.e., no long-term depletion of groundwater or interrelated surface water). This operating plan also addresses groundwater contamination issues in the Basin, all consistent with both the GWMP and the MOU described above. This operating plan is based on the concept that pumping can vary from year to year to allow increased groundwater use in dry periods and increased recharge during wet periods, and to collectively assure that the Basin is adequately replenished through various wet/dry cycles. As described in the GWMP and the MOU, the operating yield concept has been quantified as ranges of annual pumping volumes.

The ongoing work of the MOU has produced two important reports. The first report, dated April 2004, documents the development and calibration of the groundwater flow model for the Santa Clarita Valley.<sup>12</sup> The second report, dated August 2005, presents the modeling analysis of the CLWA/retail water purveyor groundwater operating plan for the valley, and concludes that the plan will not cause detrimental short or long-term effects to the groundwater and surface water resources in the valley and, therefore, the plan is a reliable, sustainable component of water supply for the valley.<sup>13</sup> The analysis of sustainability for groundwater and interrelated surface water is described further in Appendix C to the 2005 UWMP (see **Appendix 3.13**).

The groundwater operating plan, summarized in **Table 3.13-2, Groundwater Operating Plan for the Santa Clarita Valley**, is further described below. The operating plan addresses both the Alluvium and Saugus Formation.

**Table 3.13-2**  
**Groundwater Operating Plan for the Santa Clarita Valley**

Aquifer	Normal Years	Groundwater Production (af)		
		Dry Year 1	Dry Year 2	Dry Year 3
Alluvium	30,000 to 40,000	30,000 to 35,000	30,000 to 35,000	30,000 to 35,000
Saugus	7,500 to 15,000	15,000 to 25,000	21,000 to 25,000	21,000 to 35,000
<b>Total</b>	<b>37,500 to 55,000</b>	<b>45,000 to 60,000</b>	<b>51,000 to 60,000</b>	<b>51,000 to 70,000</b>

Source: 2005 UWMP, 2009 Water Report (May 2010), and 2009 Basin Yield Update. See **Appendix 3.13** for these reports.

<sup>12</sup> See *Regional Groundwater Flow Model for the Santa Clarita Valley: Model Development and Calibration*, prepared for the Upper Basin Water Purveyors by CH2MHill, April 2004. This report was updated by CH2MHill in a report entitled, *Calibration Update of the Regional Groundwater Flow Model for the Santa Clarita Valley, Santa Clarita, California*, August 2005. Copies of these two reports are available for public review and inspection in **Appendix 3.13** of this EIR.

<sup>13</sup> See *Analysis of Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, Los Angeles County, California*, prepared by CH2MHill in cooperation with Luhdorff & Scalmanini Consulting Engineers, August 2005. This report is available for public review and inspection in **Appendix 3.13** of this EIR.

**Alluvium** – As stated in the 2005 UWMP, 2009 Water Report, and the 2009 *Basin Yield Update*, the operating plan for the Alluvial aquifer involves pumping from the Alluvial aquifer in a given year, based on local hydrologic conditions in the eastern Santa Clara River watershed. Pumping ranges between 30,000 and 40,000 afy during normal/average and above-normal rainfall years. However, due to hydrogeologic constraints in the eastern part of the Basin, pumping is reduced to between 30,000 and 35,000 afy following multiple locally dry years.

**Saugus Formation** – As stated in the 2005 UWMP, 2009 Water Report, and the 2009 *Basin Yield Update*, pumping from the Saugus Formation in a given year is tied directly to the availability of other water supplies, particularly from the SWP. During average year conditions within the SWP system, Saugus pumping ranges between 7,500 and 15,000 afy. Planned dry-year pumping from the Saugus Formation ranges between 15,000 and 25,000 afy during a drought year and can increase to between 21,000 and 25,000 afy if SWP deliveries are reduced for two consecutive years and between 21,000 and 35,000 afy if SWP deliveries are reduced for three consecutive years. Such pumping would be followed by periods of reduced (average-year) pumping, at rates between 7,500 and 15,000 afy, to further enhance the effectiveness of natural recharge processes that would cause groundwater levels and storage volumes to recover after the higher pumping during dry years. For reference to the groundwater operating plan historical and projected groundwater pumping by retail water purveyor, please refer to **Table 3.13-3, Historical Groundwater Production by the Retail Water Purveyors**, and **Table 3.13-4, Projected Groundwater Production (Normal Year)**.

Three factors affect the availability of groundwater supplies under the groundwater operating plan. They are (1) sufficient source capacity (wells and pumps); (2) sustainability of the groundwater resource to meet pumping demand on a renewable basis; and (3) protection of groundwater sources (wells) from known contamination, or provisions for treatment in the event of contamination. All three factors are discussed below, and are addressed in further detail in Chapter 5 and Appendices C and D to the 2005 *Urban Water Management Plan* (see **Appendix 3.13**).

**Table 3.13-3**  
**Historical Groundwater Production by the Retail Water Purveyors**

Basin Name	Groundwater Pumped (af) <sup>1</sup>							
	2002	2003	2004	2005	2006	2007	2008	2009
Santa Clara River Valley East Subbasin								
<b>CLWA Santa Clarita Water Division</b>								
- Alluvium	9,513	6,424	7,146	12,408	13,156	10,686	11,878	10,077
- Saugus Formation	0	0	0	0	0	0	0	0
<b>LA County Waterworks District #36</b>								
- Alluvium	0	0	380	343	0	0	0	0
- Saugus Formation	0	0	0	0	0	0	0	0
<b>Newhall County Water District</b>								
- Alluvium	981	1,266	1,582	1,389	2,149	1,806	1,717	1,860
- Saugus Formation	3,395	2,513	3,739	3,435	3,423	3,691	4,195	3,868
<b>Valencia Water Company</b>								
- Alluvium	11,603	11,707	9,862	12,228	11,884	13,140	14,324	12,459
- Saugus Formation	965	1,068	1,962	2,513	2,449	2,367	1,770	2,836
<b>Total</b>	<b>26,457</b>	<b>22,978</b>	<b>24,671</b>	<b>32,316</b>	<b>33,061</b>	<b>31,690</b>	<b>33,884</b>	<b>31,100</b>
- Alluvium	22,097	19,397	18,970	26,368	27,189	25,632	27,919	24,396
- Saugus Formation	4,360	3,581	5,701	5,948	5,872	6,058	5,965	6,704
<b>% of Total Municipal Water Supply</b>	<b>39%</b>	<b>34%</b>	<b>34%</b>	<b>46%</b>	<b>45%</b>	<b>35%</b>	<b>45%</b>	<b>44%</b>

Notes:

<sup>1</sup> Pumping for municipal and industrial uses only. Does not include pumping for agricultural and miscellaneous uses.

Source: 2009 Santa Clarita Valley Water Report, May 2010, Table 2-1 (see **Appendix 3.13**).



## Alluvial Aquifer

Based on a combination of historical operating experience and recent groundwater modeling analysis, the Alluvial aquifer can supply groundwater on a long-term sustainable basis in the overall range of 30,000 to 40,000 afy, with a probable reduction in dry years to a range of 30,000 to 35,000 afy. Both of those ranges include about 15,000 afy of Alluvial pumping for current agricultural water uses and an estimated pumping of up to about 500 afy by small private pumpers. The dry year reduction is a result of practical constraints in the eastern part of the Basin, where lowered groundwater levels in dry periods have the effect of reducing pumping capacities in that shallower portion of the aquifer.

**Table 3.13-4**  
**Projected Groundwater Production (Normal Year)**

Basin Name	Range of Groundwater Pumping (af) <sup>1,2,3</sup>				
	2010	2015	2020	2025	2030
Santa Clara River Valley East Subbasin					
- Alluvium	19,500–37,000	19,500–37,000	19,500–37,000	19,500–37,000	19,500–37,000
- Saugus Formation	9,000–15,000	9,000–15,000	9,000–15,000	9,000–15,000	9,000–15,000

*Notes:*

<sup>1</sup> The range of groundwater production capability for each purveyor varies based on a number of factors, including each purveyor's capacity to produce groundwater, the location of its wells within the Alluvium and Saugus Formation, local hydrology, availability of imported water supplies and water demands.

<sup>2</sup> To ensure sustainability, the purveyors have committed that the annual use of groundwater pumped collectively in any given year will not exceed the purveyors' operating plan as described in the 2005 Basin Yield Report and the 2009 Basin Yield Update, and reported annually in the Santa Clarita Valley Water Reports. As noted in the discussion of the purveyors' operating plan for groundwater in Table 3-6 of the 2005 UWMP, the "normal" year quantities of groundwater pumped from the Alluvium and Saugus Formation are 30,000 to 40,000 afy and 7,500 to 15,000 afy, respectively.

<sup>3</sup> Groundwater pumping shown for purveyor municipal and industrial uses only.

Source: 2005 UWMP (see EIR Appendix 3.13)

**Background.** Total pumping from the Alluvium in 2009 was about 39,986 af, a decrease of 1,730 af from the preceding year. Total Alluvium pumping was at the upper end of the groundwater operating plan range. Of the total Alluvial pumping in 2009, about 24,396 af (61 percent) was for municipal water supply, and the balance, about 15,590 af (39 percent), was for agriculture and other smaller uses, including individual domestic uses. In a longer-term context, there has been a change in municipal/agricultural pumping distribution since SWP deliveries began in 1980, toward a higher fraction for municipal water supply (from about 50 percent to more than 65 percent of Alluvial pumpage), which reflects the general land use changes in the area. Ultimately, on a long-term average basis since the beginning of imported water deliveries from the SWP, total Alluvial pumping has been about 32,000 afy, which is at the lower end of the range of operational yield of the Alluvium. That

average has been higher over the last decade, about 38,500 afy, which remains within the range of operational yield of the Alluvium. The overall historic record of Alluvial pumping is illustrated in Figure 3-2 of the 2009 Water Report (May 2010).

Groundwater levels in various parts of the basin historically have exhibited different responses to both pumpage and climatic fluctuations. During the last 20 to 30 years, depending on location, Alluvial groundwater levels have remained nearly constant (generally toward the western end of the basin), or have fluctuated from near the ground surface when the basin is full, to as much as 100 feet lower during intermittent dry periods of reduced recharge (generally toward the eastern end of the basin). For illustration of the various groundwater level conditions in the basin, the Alluvial wells have been grouped into areas with similar groundwater level patterns, as shown in Figure 3-3 of the 2009 Water Report (May 2010). The groundwater level records have been organized into hydrograph form (groundwater elevation vs. time) as illustrated in 2009 Water Report (Figures 3-4 and 3-5). Also shown on these plots is an annual marker indicating whether the year had a below average amount of rainfall. The wells shown on these plots are representative of the respective areas, showing the range of values (highest to lowest elevation) through each area, and containing a sufficiently long-term record to illustrate trends over time.

Situated along the eastern upstream end of the Santa Clara River channel, the “Mint Canyon” area, located at the far eastern end of the groundwater basin, and the nearby “Above Saugus WRP” areas generally exhibit similar groundwater level responses to hydrologic and pumping conditions. (See 2009 Water Report [Figure 3-4].) As shown in 2009 Water Report Figure 3-6, the purveyors decreased total Alluvial pumping from the “Mint Canyon” area steadily from 2000 through 2003, and correspondingly increased pumping in the “Below Saugus WRP,” and “Below Valencia WRP” areas. In spite of a continued period of below-average precipitation from 1999 to 2003, that progressive decrease in pumping resulted in a cessation of groundwater level decline in the “Mint Canyon Area.” Subsequent wet conditions in late 2004, continuing into 2005, resulted in full recovery of groundwater storage. With such high groundwater levels, pumping in the “Mint Canyon” area was increased in 2005 and 2006, with no significant change in groundwater levels in 2005 and a slight decrease in 2006. Over the last four years, precipitation has been average to below-average. Accordingly, water levels have shown some decline, but this decline has been slowed by the reduction in pumpage in this easternmost part of the basin. Water levels remain within the historic range of levels over similar wet/dry periods. Just below the ‘Mint Canyon’ area, the ‘Above Saugus WRP’ has shown a similar decline, despite the steady rate of pumping over the last four years. Here the water levels also remain within the range of historical levels, as expected following a multi-year period without a significant wet year. These parts of the Valley have historically experienced a number of alternating wet and dry hydrologic conditions (2009 Water Report

Figure 3-4) during which groundwater level declines have been followed by returns to high or mid-range historic levels. This trend has continued over the last four years where below-average hydrologic conditions in 2009 followed three average to below-average years, and groundwater levels remain within mid-range levels.

In the “Bouquet Canyon” area, pumping has remained relatively constant for the last 10 years, and water levels have fluctuated with consecutive wet or dry years. During and since the most recent wet conditions of 2004 and 2005, water levels returned to within historic mid-range levels. During 2009, groundwater level trends either leveled off or showed some increase with the onset of precipitation at the end of the year. This groundwater level response to wet/dry years and pumping is typical for this area of the basin and, for 2009, levels have remained within the range of historical levels. When water levels are low, well yields and pumping capacities in this and other eastern areas can be impacted. The affected purveyors typically respond by increasing use of Saugus Formation and imported (SWP) supplies, as shown in 2009 Water Report Table 2-3. The purveyors also shift a fraction of the Alluvial pumping that would normally be supplied by the eastern areas to areas further west, where well yields and pumping capacities remain fairly constant because of smaller groundwater level fluctuations.

In the western parts and lower elevations of the Alluvium, groundwater levels respond to pumping and precipitation in a similar manner, but to an attenuated or limited extent compared to those situated in the eastern, higher elevation areas. As shown in the western group of hydrographs in 2009 Water Report Figure 3-5, groundwater level fluctuations become more subtle moving westward and lower in the Valley. The “Below Saugus WRP” area, along the Santa Clara River immediately downstream of the Saugus Water Reclamation Plant, and the “San Francisquito Canyon” area generally exhibit similar groundwater level trends. In this middle part of the basin, historical groundwater levels were lower in the 1950s and 60s than current levels. Groundwater levels in this area notably recovered as pumping declined through the 1960s and 1970s. They have subsequently sustained generally high levels for much of the last 30 years, with three dry-period exceptions: mid-1970s, late 1980s to early 1990s, and the late 1990s to early 2000s. Recoveries to previous high groundwater levels followed both of the short dry-period declines in the 1970s and 1990s. More recently, groundwater levels recovered significantly in both areas, to historic highs, following a wetter than average year in 2004 and a significantly wet year in 2005. Since 2005, pumping has been increasing in the “Below Saugus WRP” area, while “San Francisquito Canyon” area pumping approximately doubled in 2005, and has since gradually declined and leveled off over the last three years. Despite the current multi-year period of average to below average precipitation, groundwater levels in these two areas remain in mid-range to high historical range.

The “Castaic Valley” area is located along Castaic Creek below Castaic Lake. Below that and along the Santa Clara River, downstream of the existing Valencia Water Reclamation Plant, is the “Below Valencia WRP” area, where discharges of treated effluent from the Valencia WRP to the Santa Clara River contribute to groundwater recharge. In the “Castaic Valley” area, groundwater levels continue to remain fairly constant, with slight responses to climatic and other fluctuations, since the 1950s (2009 Water Report Figure 3-5). Small changes in groundwater levels over the last four years are consistent with other short-term historical fluctuations. The long-term, generally constant trend remained through 2009. The “Below Valencia WRP” area groundwater levels exhibit slight, if any, response to climatic fluctuations, and have remained fairly constant since the 1950s despite a notable increase in pumping through the 1990s that has since remained relatively steady over the last seven years, through 2009 (2009 Water Report Figure 3-5 and 3-6).

In summary, depending on the period of available data, the history of groundwater levels in the Alluvium shows the same general picture: recent (last 30 years) groundwater levels have exhibited historic highs; in some locations, there are intermittent dry-period declines (resulting from use of some groundwater from storage) followed by wet-period recoveries (and associated refilling of storage space). On a long-term basis, whether over the last 29 years since importation of supplemental SWP water, or over the last 40 to 50 years (since the 1950s–1960s), the Alluvium shows no chronic trend toward decreasing water levels and storage, and thus shows no symptoms of water level-related overdraft. Consequently, pumping from the Alluvium has been and continues to be sustainable, well within the operational yield of that aquifer on a long-term average basis, and within the operating yield in almost every individual year.

**Adequacy of Supply.** For municipal water supply, with existing wells and pumps, the three retail water purveyors with Alluvial wells (NCWD, SCWD, and VWC) have a combined pumping capacity from active wells (not contaminated by perchlorate) of 38,600 afy. Alluvial pumping capacity from all the active municipal supply wells is summarized in **Table 3.13-5, Pumping Rates Simulated for Individual Alluvial Aquifer Wells under the 2008 Groundwater Operating Plan.**

**Table 3.13-5**  
**Pumping Rates Simulated for Individual Alluvial Aquifer Wells under the 2008 Groundwater Operating Plan**

Well Name	Alluvial Subarea	2005 Operating Plan		2008 Operating Plan			Comments
		Normal	Dry	Normal	Dry Yr 1	Dry Yr 2+	
NCWD-Castaic 1	Castaic Valley	385	345	350	300	250	Assume similar pumping as at NCWD-Castaic3 during early 1980s
NCWD-Castaic 2	Castaic Valley	166	125	100	100	100	
NCWD-Castaic 4	Castaic Valley	100	45	100	0	0	
NCWD-Castaic 7	Castaic Valley			300	200	200	
NCWD-Pinetree 1	Above Mint Canyon	164	0	150	0	0	
NCWD-Pinetree 3	Above Mint Canyon	545	525	350	300	300	
NCWD-Pinetree 4	Above Mint Canyon	300	0	300	200	200	
NCWD-Pinetree 5	Above Mint Canyon			300	200	200	
<b>NCWD Total</b>		<b>1,660</b>	<b>1,040</b>	<b>1,950</b>	<b>1,300</b>	<b>1,250</b>	
NLF-161	Below Valencia WRP	485	485	1,000	1,000	1,000	Pumping was assigned to former B7 well in 2005 analysis.
NLF-B10	Below Valencia WRP	344	344	500	350	350	
NLF-B11	Below Valencia WRP	232	232	100	200	200	
NLF-B14	Below Valencia WRP			300	1,000	1,000	
NLF-B20	Below Valencia WRP	584	584	350	500	500	
NLF-B5	Below Valencia WRP	1,582	1,582	2,400	1,900	1,900	
NLF-B6	Below Valencia WRP	1,766	1,766	1,100	1,100	1,100	
NLF-C	Below Valencia WRP	1,373	1,373	1,100	1,000	1,000	
NLF-C3	Below Valencia WRP	192	192	100	200	200	
NLF-C4	Below Valencia WRP	809	809	200	450	450	
NLF-C5	Below Valencia WRP	850	850	900	850	850	
NLF-C7	Below Valencia WRP	1,107	1,107	350	300	300	
NLF-C8	Below Valencia WRP	594	594	400	400	400	
NLF-E5	Below Valencia WRP	750	750	100	150	150	
NLF-E9	Below Valencia WRP	814	814	900	350	350	
NLF-G45	Below Valencia WRP	390	390	350	400	400	
<b>NLF Total</b>		<b>11,872</b>	<b>11,872</b>	<b>10,150</b>	<b>10,150</b>	<b>10,150</b>	

Well Name	Alluvial Subarea	2005		2008			Comments
		Operating Plan		Operating Plan			
		Normal	Dry	Normal	Dry Yr 1	Dry Yr 2+	
SCWD-Clark	Bouquet Canyon	782	700	700	700	700	Pumping transferred from former well SCWD-Stadium
SCWD-Guida	Bouquet Canyon	1,320	1,230	1,300	1,250	1,200	
SCWD-Honby	Above Saugus WRP	696	870	1,000	850	700	
SCWD-Lost Canyon 2	Above Mint Canyon	741	640	700	700	650	
SCWD-Lost Canyon 2A	Above Mint Canyon	1,034	590	700	650	600	
SCWD-Mitchell #5A	Above Mint Canyon	0	0	500	350	200	
SCWD-Mitchell #5B	Above Mint Canyon	557	0	800	550	300	
SCWD-N. Oaks Central	Above Mint Canyon	822	1,640	850	800	700	
SCWD-N. Oaks East	Above Mint Canyon	1,234	485	800	750	700	
SCWD-N. Oaks West	Above Mint Canyon	898	0	800	750	700	
SCWD-Sand Canyon	Above Mint Canyon	930	195	1,000	600	200	
SCWD-Sierra	Above Mint Canyon	846	0	1,100	900	700	
SCWD-Valley Center	Above Saugus WRP	800	800	800	800	800	
SCWD Total		10,660	7,150	11,050	9,650	8,150	
VWC-D	Castaic Valley	690	690	880	880	880	Pumping transferred from former wells VWC-T2 and VWC-T4  Pumping transferred from former well VWC-U3  Pumping was assigned to former W6 well in 2005 analysis.
VWC-E15	Below Valencia WRP			800	800	800	
VWC-N	Below Saugus WRP	620	620	650	650	650	
VWC-N7	Below Saugus WRP	1,160	1,160	1,160	1,160	1,160	
VWC-N8	Below Saugus WRP	1,160	1,160	1,160	1,160	1,160	
VWC-Q2	Below Saugus WRP	985	985	1,100	1,100	1,100	
VWC-S6	Below Saugus WRP	865	865	1,000	1,000	1,000	
VWC-S7	Below Saugus WRP	865	865	500	500	500	
VWC-S8	Below Saugus WRP	865	865	500	500	500	
VWC-T7	Above Saugus WRP	920	920	750	750	750	
VWC-U4	Above Saugus WRP	935	935	800	800	800	
VWC-U6	Above Saugus WRP	825	825	800	800	800	
VWC-W10	San Francisquito Canyon	865	865	1,000	1,000	1,000	
VWC-W11	San Francisquito Canyon	600	600	800	800	800	
VWC-W9	San Francisquito Canyon	350	350	950	950	950	
VWC Total		11,705	11,705	12,850	12,850	12,850	

Well Name	Alluvial Subarea	2005		2008			Comments
		Operating Plan Normal	Operating Plan Dry	Operating Plan			
		Normal	Dry	Normal	Dry Yr 1	Dry Yr 2+	
Robinson Ranch	Above Mint Canyon	932	400	600	550	450	<u>2008 Operating Plan:</u> 35,000 to 40,000 afy in normal and wet years 30,000 to 35,000 afy in dry years
WHR	Castaic Valley	1,600	1,600	2,000	2,000	2,000	
Purveyor Alluvial Usage		24,025	19,895	25,850	23,800	22,250	
Other Alluvial Usage		14,404	13,872	12,750	12,700	12,600	
Total Alluvial Pumping		38,429	33,767	38,600	36,500	34,850	
<hr/>							
Notes:							
All pumping volumes are listed in units of acre-feet per year (afy).							
Wells that are not listed are assumed to not be pumping in the future.							
NLF = Newhall Land & Farming Company; NCWD = Newhall County Water District							
SCWD = Santa Clarita Division of Castaic Lake Water Agency; VWC = Valencia Water Company							
WHR = Wayside Honor Rancho, whose wells are owned by the Los Angeles County Waterworks District No. 36							
“Other Alluvial Usage” consists of pumping by NLF, WHR, and Robinson Ranch. An additional 500 afy of pumping by other private well owners is not included in this table.							
Source: Analysis of Groundwater Supplies and Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, August 2009.							

**Table 3.13-6**  
**Pumping Rates Simulated for Individual Saugus Formation Wells**  
**under the 2008 Groundwater Operating Plan**

Owner	Well Name	Non-Drought Years	Drought Year 1	Drought Year 2	Drought Year 3
NCWD	12	1,765	2,494	2,494	2,494
	13	1,765	2,494	2,494	2,494
	<b>Total Pumping (NCWD Wells)</b>	<b>3,530</b>	<b>4,988</b>	<b>4,988</b>	<b>4,988</b>
SCWD	Saugus1	1,772	1,772	1,772	1,772
	Saugus2	1,772	1,772	1,772	1,772
	<b>Total Pumping (SCWD Wells)</b>	<b>3,544</b>	<b>3,544</b>	<b>3,544</b>	<b>3,544</b>
Private	Palmer Golf Course	500	500	500	500
	<b>Total Pumping (Future Golf)</b>	<b>500</b>	<b>500</b>	<b>500</b>	<b>500</b>
VWC	159	50	50	50	50
	160 (Municipal)	500	830	830	830
	160 (Val. Ctry Club)	500	500	500	500
	201	300	300	3,777	3,777
	205	1,211	2,945	4,038	4,038
	206	1,175	2,734	3,500	3,500
	207	1,175	2,734	3,500	3,500
	<b>Total Pumping (VWC Wells)</b>	<b>4,911</b>	<b>10,093</b>	<b>16,195</b>	<b>16,195</b>
	Future #1	0	0	0	3,250
	Future #2	0	0	0	3,250
	Future #3	0	0	0	3,250
	<b>Total Pumping (Future Wells)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9,750</b>
	<b>Total Pumping (All Saugus Wells)</b>	<b>12,485</b>	<b>19,125</b>	<b>25,227</b>	<b>34,977</b>

*Notes:*

*All pumping volumes are listed in units of acre-feet per year (afy).*

*Wells that are not listed are assumed to not be pumping in the future.*

*NLF = Newhall Land & Farming Company; NCWD = Newhall County Water District;*

*SCWD = Santa Clarita Division of Castaic Lake Water Agency; VWC = Valencia Water Company*

*Source: Analysis of Groundwater Supplies and Groundwater Basin Yield, Upper Santa Clara River Groundwater Basin, East Subbasin, August 2009.*

The locations of the various municipal Alluvial wells throughout the Basin are illustrated on **Figure 3.13-4, Municipal Alluvial Well Locations; Santa Clara River Valley, East Groundwater Subbasin**. As indicated, the pumping capacity of the SCWD Stadium well (deactivated due to the perchlorate contamination), representing another 800 afy of pumping capacity, has been transferred to the Valley Center well.



**Sustainability.** Until recently, the long-term renewability of Alluvial groundwater was empirically determined from approximately 60 years of recorded experience. This empirical data confirmed long-term stability in groundwater levels and storage, with some dry period fluctuations in the eastern part of the Basin, over a historical range of total Alluvial pumpage from as low as about 20,000 afy to as high as about 43,000 afy. These empirical observations have been complemented by the development and application of a numerical groundwater flow model, which has been used to predict aquifer response to the planned operating ranges of pumping. The numerical groundwater flow model also has been used to analyze the control of perchlorate contaminant migration under selected pumping conditions that would restore, with treatment, pumping capacity inactivated due to perchlorate contamination detected in some wells in the Basin. The latter use of the model is described in Chapter 5 of the 2005 *UWMP*, and the 2009 *Basin Yield Update*, which address the Saugus Formation and the overall approach to the perchlorate contamination found in four Saugus wells.

In terms of adequacy and availability, the combined active Alluvial groundwater source capacity of municipal wells is approximately 38,600 afy. This is more than sufficient to meet the municipal, or urban, component of groundwater supply from the Alluvium.

To examine the yield of the Alluvium or, the sustainability of the Alluvium on a renewable basis, the groundwater flow model was used to examine the long-term projected response of the aquifer to pumping for municipal and agricultural uses in the 30,000 to 40,000 afy range under average/normal and wet conditions, and in the 30,000 to 35,000 afy range under locally dry conditions (for modeling methodology, please see the 2009 Basin Yield Update presented in **Appendix 3.13**). To examine the response of the entire aquifer system, the model also incorporated pumping from the Saugus Formation in accordance with the normal (7,500 to 15,000 afy) and dry year (15,000 to 35,000 afy) operating plan for that aquifer. The model was run over a 78-year hydrologic period, which was selected from actual historical precipitation to examine a number of hydrologic conditions expected to affect both groundwater pumping and groundwater recharge.

The selected 78-year simulation period was assembled from an assumed recurrence of 1980 to 2003 conditions, followed by an assumed recurrence of 1950 to 2003 conditions. The 78-year period was analyzed to define both local hydrologic conditions (normal and dry), which affect the rate of pumping from the Alluvium, and hydrologic conditions that affect SWP operations, which in turn affect the rate of pumping from the Saugus. The resultant simulated pumping cycles included the distribution of pumping for each of the existing Alluvial aquifer wells, for normal and dry years, respectively, as shown in **Table 3.13-5**.

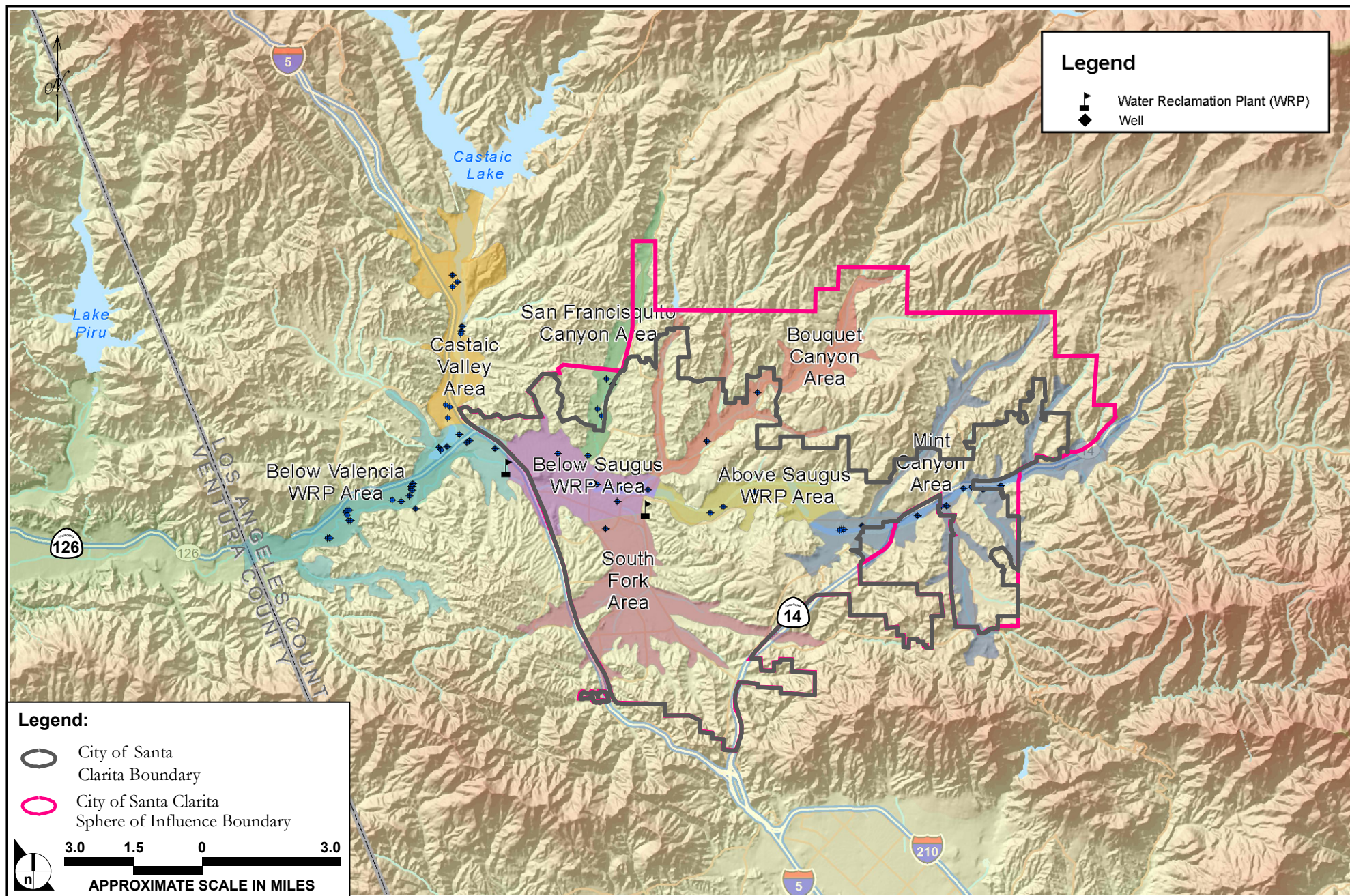


FIGURE 3.13-4

Municipal Alluvial Well Locations; Santa Clara River Valley, East Groundwater Subbasin



Simulated Alluvial aquifer response to the range of hydrologic conditions and pumping stresses is essentially a long-term repeat of the historical conditions that have resulted from similar pumping over the last several decades. The resultant response consists of (1) generally constant groundwater levels in the middle to western portion of the Alluvium and fluctuating groundwater levels in the eastern portion as a function of wet and dry hydrologic conditions, (2) variations in recharge that directly correlate with wet and dry hydrologic conditions, and (3) no long-term decline in groundwater levels or storage. The Alluvial aquifer is considered a sustainable water supply source to meet the Alluvial portion of the operating plan for the Basin. This is based on the combination of actual experience with Alluvial aquifer pumping at capacities similar to those planned for the future and the resultant sustainability (recharge) of groundwater levels and storage, and further based on modeled projections of aquifer response to planned pumping rates that also show no depletion of groundwater.

**Aquifer Protection.** The remaining key consideration related to current and future use of the Alluvium is the impact of perchlorate contamination. Extensive investigation of the extent of perchlorate contamination, combined with the groundwater modeling previously described, has led to the current plan by CLWA and the retail purveyors, which call for restoration of impacting pumping (well) capacity and integrated control of contamination migration. In the short term, the response plan for Alluvial production wells, located down gradient of the former Whittaker-Bermite site, was to promptly install wellhead treatment to ensure adequate water supplies. This plan was effectively implemented in 2005 by Valencia Water Company through the permitting and installation of wellhead treatment at Valencia Water Company's Well Q2. After returning the well to service with wellhead treatment in October 2005, followed by nearly two years of operation with wellhead treatment, during which there was no detection of perchlorate, Valencia Water Company was authorized by the California Department of Public Health to discontinue treatment. Since that time, Well Q2 has been operating without treatment and there has been no detection of perchlorate since the wellhead treatment was discontinued. As a result, Well Q2 remains a part of the Valley's active municipal groundwater source capability.

The purveyors' response plan also addressed the impacted Alluvial production well owned by SCWD (Stadium Well), which was shut down due to the detection of perchlorate in 2002. In response, SCWD recently drilled a replacement well (Valley Center Well) to the east, north-northeast of the former Whittaker-Bermite site. The Valley Center Well also will be a part the Valley's active municipal groundwater source capability.

As discussed below, the long-term plan includes the CLWA groundwater containment, treatment, and restoration project to prevent further downstream migration of perchlorate, the treatment of water extracted as part of that containment process, and the recovery of lost local groundwater production from the Saugus Formation.

### Saugus Formation

Based on historical operating experience and extensive recent testing and groundwater modeling analysis, the Saugus Formation can supply water on a long-term sustainable basis in a normal range of 7,500 to 15,000 afy, with intermittent increases to 25,000 to 35,000 af in dry years. The dry-year increases, based on limited historical observation and modeled projections, demonstrate that a small amount of the large groundwater storage in the Saugus Formation can be pumped over a relatively short (dry) period. This would be followed by recharge (replenishment) of that storage during a subsequent normal-to-wet period when pumping would be reduced.

**Background.** Total pumping from the Saugus in 2009 was about 7,700 af, or about 750 af more than in the preceding year. Of the total Saugus pumping in 2009, most (about 6,700 af) was for municipal water supply and the balance (1,000 af) was for agricultural and other irrigation uses. Historically, groundwater pumping from the Saugus peaked in the early 1990s and then steadily declined through the remainder of that decade. Since then, Saugus pumping had been in the range of about 4,000 to 6,500 afy, with the increase to almost 7,700 af in 2007 and again in 2009. Over the last five years, the municipal use of Saugus water has been relatively unchanged; almost all of the relatively small fluctuations from year to year have been related to non-municipal usage. On a long-term average basis since the importation of SWP water, total pumping from the Saugus Formation has ranged between a low of about 3,700 afy (in 1999) and a high of nearly 15,000 afy (in 1991); average pumping from 1980 to present has been about 6,800 afy. These pumping rates remain well within, and generally at the lower end of, the range of Operational Yield of the Saugus Formation. The overall historic record of Saugus pumping is illustrated in Figure 3-8 of the 2009 Water Report (May 2010).

Unlike the Alluvium, which has an abundance of wells with extensive water level records, the water level data for the Saugus Formation are limited by both the distribution of the wells in that Formation and the periods of water level records. The wells that do have water level records extending back to the mid-1960s indicate that groundwater levels in the Saugus Formation were highest in the mid-1980s and are currently higher than they were in the mid-1960s (2009 Water Report Figure 3-9). Based on these data, there is no evidence of any historic or recent trend toward permanent water level or storage decline. There continue to be seasonal fluctuations in groundwater levels but the prevalent longer-term trend is one of general stability.

Consistent with the 2001 Update Report (Slade), the 2005 Basin Yield Report (CH2M Hill and Luhdorff and Scalmanini Consulting Engineers [LSCE]), the Basin Yield Update, and the 2005 UWMP, the purveyors continue to maintain groundwater storage and associated water levels in the Saugus Formation so that supply is available during drought periods, when Alluvial pumping might be reduced and/or SWP or other supplemental supplies also decreased. The period of increased pumping during the early 1990s is a good example of this management strategy. Most notably, in 1991, when SWP deliveries

were substantially reduced, increased pumping from the Saugus made up almost half of the decrease in SWP deliveries. The increased Saugus pumping over several consecutive dry years (1991–1994) resulted in short-term declining groundwater levels, reflecting the use of water from storage. However, groundwater levels subsequently recovered when pumping declined, reflecting recovery of groundwater storage in the Saugus Formation.

**Adequacy of Supply.** For municipal water supply with existing wells, the three retail water purveyors with Saugus wells (NCWD, SCWD, and VWC) have a combined pumping capacity from active wells (accounting for those contaminated by perchlorate) of 12,485 afy in non-drought years, and up to 34,977 afy by the third year of a three-year drought. Saugus pumping capacity from all the active municipal supply wells is summarized in **Table 3.13-6, Pumping Rates Simulated for Individual Saugus Formation Wells under the 2008 Groundwater Operating Plan**, and the locations of the various active municipal Saugus wells are illustrated on **Figure 3.13-5, Saugus Well Locations; Santa Clara River Valley, East Groundwater Subbasin**. These capacities do not include the four Saugus wells contaminated by perchlorate, although they indirectly reflect the capacity of one of the contaminated wells, Valencia Water Company (VWC's) Well 157, which has been sealed and abandoned, and replaced by VWC's Well 206 in a non-impacted part of the Basin.

In terms of adequacy and availability, the combined active Saugus groundwater source capacity of municipal wells of up to 19,125 afy, is more than sufficient to meet the planned use of Saugus groundwater in normal years of 7,500 to 15,000 afy. This currently active capacity is more than sufficient to meet water demands, in combination with other sources, if both of the next two years are dry. At that time, the combination of currently active capacity and restored impacted capacity, through a combination of treatment at two of the impacted wells and replacement well construction, will provide sufficient total Saugus capacity to meet the planned use of Saugus groundwater during multiple dry-years of 35,000 af, if that third year is also a dry year.

**Sustainability.** Until recently, the long-term sustainability of Saugus groundwater was empirically determined from limited historical experience. The historical record shows fairly low annual pumping in most years, with one four-year period of increased pumping up to about 15,000 afy that produced no long-term depletion of the substantial groundwater storage in the Saugus. Those empirical observations have now been complemented by the development and application of the numerical groundwater flow model, which has been used to examine aquifer response to the operating plan for pumping from both the Alluvium and the Saugus and also to examine the effectiveness of pumping for both contaminant extraction and control of contaminant migration within the Saugus Formation. The latter aspects of Saugus pumping are discussed in further detail in the *2009 Basin Yield Update* (see **Appendix 3.13**).

To examine the yield of the Saugus Formation or, its sustainability on a renewable basis, the groundwater flow model was used to examine long-term projected response to pumping from both the Alluvium and the Saugus over the 78-year period of hydrologic conditions using alternating wet and dry periods as have historically occurred. The pumping simulated in the model was in accordance with the operating plan for the Basin. For the Saugus, simulated pumpage included the planned restoration of recent historic pumping from the perchlorate-impacted wells. In addition to assessing the overall recharge of the Saugus, that pumping was analyzed to assess the effectiveness of controlling the migration of perchlorate by extracting and treating contaminated water close to the source of contamination.

Simulated Saugus Formation response to the ranges of pumping under assumed recurrent historical hydrologic conditions is consistent with actual experience under smaller pumping rates. The response consists of (1) short-term declines in groundwater levels and storage near pumped wells during dry-period pumping; (2) rapid recovery of groundwater levels and storage after cessation of dry-period pumping; and (3) no long-term decreases or depletion of groundwater levels or storage. The combination of actual experience with Saugus pumping and recharge up to about 15,000 afy, now complemented by modeled projections of aquifer response that show long-term utility of the Saugus at 7,500 to 15,000 afy in normal years and rapid recovery from higher pumping rates during intermittent dry periods, shows that the Saugus Formation can be considered a sustainable water supply source to meet the Saugus portion of the operating plan for the Basin.

**Aquifer Protection.** The operating plan for the Saugus Formation accounts for historical perchlorate detections and the resulting containment and remedial response activities that are being constructed at this time. As described in further detail below, in 1997, a total of four Saugus production wells were inactivated for water supply service due to the presence of perchlorate. The four Saugus wells removed from service were as follows: (1) two Saugus production wells owned by SCWD (Saugus wells 1 and 2); (2) one Saugus production well owned by NCWD (NCWD Well 11); and (3) one Saugus production well owned by Valencia Water Company (VWC Well 157).

As part of the ongoing implementation of perchlorate containment and restoration of impacted capacity, VWC Well 157 was abandoned in January 2005 and replaced by new Well VWC 206 in a non-impacted portion of the basin. Thus, the Saugus capacity analysis includes planned pumping from replacement Well VWC 206.



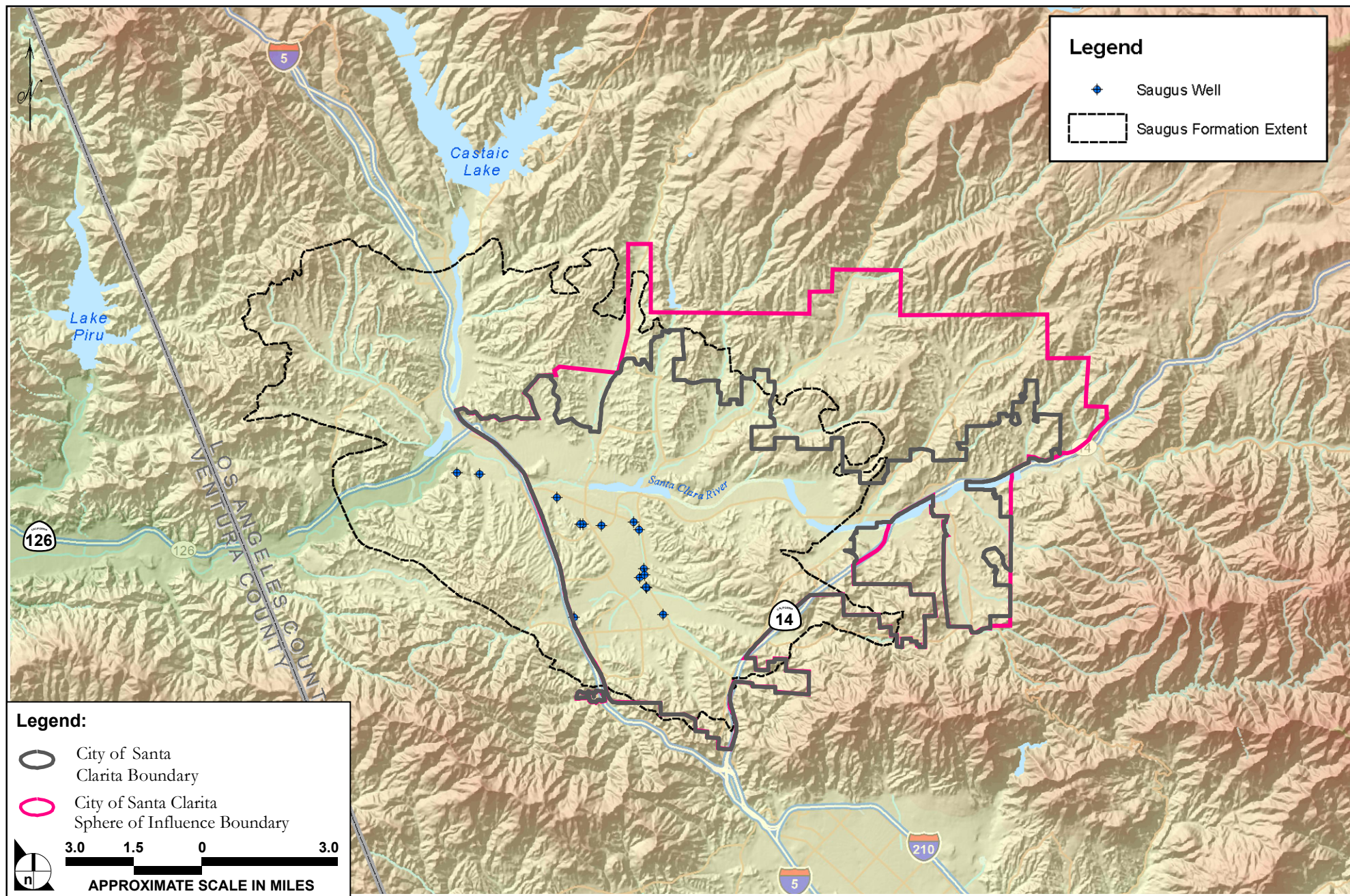


FIGURE 3.13-5

Saugus Well Locations; Santa Clara River Valley, East Groundwater Subbasin

The longer range plan of CLWA and the purveyors has been to pursue a project to contain further downstream migration of perchlorate from the former Whittaker-Bermite site, treatment and subsequent use of the pumped water from the containment process for water supply, and installation of replacement wells in non-impacted portions of the basin to restore the remainder of groundwater supply impacted by perchlorate.

### **Impacted Alluvial and Saugus Wells**

A small group of wells that have been impacted by perchlorate represent a temporary loss of well capacity within the CLWA service area. Of the six wells that were initially removed from active water supply service upon the detection of perchlorate, three wells remain out of service. However, CLWA and the purveyors have developed an implementation plan that would restore this well capacity. The implementation plan includes a combination of treatment facilities and replacement wells.

In 1997, the State of California conducted tests on a number of municipal water wells owned by Santa Clarita Water Division of Castaic Lake Water Agency (SCWD), Newhall County Water District (NCWD) and Valencia Water Company (VWC) located in the vicinity of the former Whittaker Bermite site. These and subsequent tests found perchlorate in four of the purveyors' deep Saugus Formation aquifer wells: NCWD-11, SCWD Saugus 1, SCWD Saugus 2 and VWC-157 at maximum levels ranging from 14 ppb to 47 ppb depending on the well. These wells were removed from active service and have not been used for drinking water supplies since 1997. In November 2002, perchlorate was found in a shallow Alluvial aquifer groundwater well—SCWD Stadium—at levels up to 5.9 ppb. In April 2005, perchlorate contamination was found in another shallow Alluvial aquifer groundwater well—VWC-Q2. The source of the perchlorate is believed to be from the Whittaker-Bermite site given the proximity of all six impacted wells to the property and the fact that both groundwater and surface water flows from the property to the six wells.

In November, 2000 Castaic Lake Water Agency (CLWA), NCWD, SCWD, and VWC (collectively, "Plaintiffs") filed a complaint against past owner Whittaker and current owners Whittaker, Santa Clarita, LLC, (SCLLC) and Remediation Financial, Inc., (RFI) (SCLLC and RFI are collectively referred to as "Defendants") in the California Central District Court asserting that hazardous substances (including perchlorate) released from the Whittaker Bermite site contaminated some of Plaintiffs' water production wells. In July 2002, Plaintiffs moved the Court for partial summary judgment that Defendants were liable for response costs under the Comprehensive Environmental Response, Compensation, and Recovery Act (CERCLA). At the same time, Whittaker moved the Court to establish Plaintiffs' liability under CERCLA. In July 2003, the Court granted (in part) Plaintiffs' motion and found that Whittaker and SCLLC were



liable for CERCLA response costs and denied Whittaker's motion. *Castaic Lake Water Agency v. Whittaker Corporation*, 272 F.Supp.2d 1053 (2003).

In September 2003, the parties entered into an interim settlement agreement that stayed litigation to allow the parties to, *inter alia*, develop an engineering solution to contain and abate the groundwater contamination and negotiate a final settlement agreement. As a condition for staying litigation activities, Defendants were required to reimburse CLWA for past monitoring and investigation costs and fund the development of the engineering solution. While the parties developed a groundwater abatement/containment plan, they were unable to reach a final settlement agreement. The interim settlement agreement expired on January 31, 2005.

In July 2004, Defendants SCLLC and RFI, the current owners of the Whittaker property filed a petition for chapter 11 bankruptcy protection and were subject to the automatic stay of litigation. The SCLLC and RFI bankruptcy filing complicated settlement negotiations because any proposed settlement offer that involved SCLLC and RFI insurance proceeds—a substantial and important source of settlement funds - required bankruptcy court approval.

The stay of litigation lapsed on January 31, 2005, without a final settlement and on March 23, 2005, the Court ordered the parties to mediate the matter before the Honorable Eugene Lynch (ret.). On April 19, 2005, Plaintiffs and Defendants reached an agreement in principle on damages that was subject to Defendants reaching a settlement funding agreement with their insurance carriers. During the April 2005 mediation, VWC informed Defendants of the perchlorate contamination found in VWC's groundwater well Q2. Whittaker agreed to provide \$500,000 for the installation of a well head treatment unit. All capital as well as operating and maintenance costs for this treatment unit were funded by insurance companies representing the current and past owners of the property. Utilizing these funds, VWC installed a perchlorate removal system utilizing ion exchange technology. After only six months from the initial detection of perchlorate in the well, Q2 was returned to active service on October 12, 2005. Subsequently in October 2007, the California Department of Public Health approved a request by VWC to remove the treatment system as a result of two years of continuous operation without a detection of perchlorate in the untreated groundwater produced by Q2. Currently, Q2 remains in operation without any requirement for well head treatment.

In July 2005, the parties reported that settlement negotiations between Plaintiffs and Defendants had not progressed because Defendants and their insurance carriers had not reached an agreement on funding the settlement. The Court ordered the parties to resume litigation activities on August 16, 2005. In November 2005, Defendants and their insurance carriers reached an agreement on the allocation of environmental insurance proceeds for the site and funding of a potential settlement with the Plaintiffs

and submitted the proposed settlement agreement to the bankruptcy court for approval. The Bankruptcy court approved the settlement agreement involving the insurance proceeds and in January 2006, Defendants provided Plaintiffs with a draft plan to utilize the insurance proceeds to settle Plaintiffs' groundwater contamination claims.

In May 2007, the Water Purveyors announced a settlement of their lawsuit against Whittaker to contain and remove perchlorate from the Santa Clarita Valley's groundwater aquifers. The Water Purveyors estimate this settlement provides up to \$100 million to address the problem. The underlying litigation was dismissed by the US District Court in August 2007. See Draft EIR **Appendix 3.13** which contains the following documents: (1) *Castaic Lake Water Agency Litigation Settlement Agreement*, (2) *Order Granting Joint Motion for Court Approval, Good Faith Settlement Determination and Entry of Consent Order* July 16, 2007, and (3) *Stipulation to Dismiss Plaintiffs' Claims and Defendants' Counterclaim*, August 20, 2007.

The Settlement Agreement provides funding to construct replacement wells, pipelines, and a treatment plant to remove perchlorate. The Settlement Agreement also provides funds to operate and maintain the treatment system for up to 30 years, which is estimated to cost as much as \$50 million over the life of the project. The treatment plant has been designed by CLWA and the Settlement Agreement provides \$1.7 million to reimburse CLWA for past expenditures. In addition, a \$10 million "rapid response fund" will be established to allow the water purveyors to immediately treat threatened wells that could become impacted by perchlorate contamination in the future. VWC received a total of \$3.5 million under the Settlement Agreement, which included \$2.5 million for past environmental claims and \$1.0 million to close and abandon V-157 and drill replacement well V-206.

Following the settlement of the litigation, VWC and the other water purveyors entered into two separate agreements, each formally prepared as a Memorandum of Understanding (MOU). These MOUs were necessary to implement the various obligations under the Settlement Agreement. The first MOU sets forth the rights among the water purveyors to receive payments pursuant to the Settlement Agreement and clarifies project administration that includes such things as project modification, future perchlorate detections, monitoring, payment of ongoing legal fees, dispute resolution and other provisions described in the Settlement Agreement. The second MOU sets forth the operational plan and financial arrangements to deliver certain quantities of groundwater from the perchlorate treatment system and a future replacement well field that, in total, would restore the water supply capacity impacted by perchlorate to SCWD and NCWD. Both MOUs are incorporated into this Draft EIR by reference and are available for review at the Valencia Water Company.

### *Available Groundwater Supplies – Outside CLWA Service Area*

As indicated above, a portion of the Planning Area lies outside and east of the Santa Clara River Valley Groundwater Basin, East Subbasin. Unlike portions of the Planning Area outside of the CLWA service area to the west, north and south, this area is not served with water from the Planning Area water purveyors, and does not have access to groundwater from the East Subbasin (i.e., the Alluvial Aquifer and Saugus Formation). Instead, water is provided via private groundwater wells in Holocene alluvium, which is thickest in the channel of the Santa Clara River, thinning both east and west of the community of Acton, and private wells in Pleistocene terrace deposits found along the low-lying flanks of the foothills and upper reaches of the Santa Clara River. Limited data is available regarding the past and current condition of this area from a groundwater production perspective, thereby creating a level of uncertainty regarding the ability of this area to support any increase in development activity. No studies are known to have been completed indicating the amount of water pumped from the ground, nor have there been studies completed indicating the sustainable yield of groundwater in this portion of the Planning Area. In the nearby Acton Valley further to the east, hydrographs show a general decline in groundwater levels during the 1950s through the mid-1970s (Slade 1990). Water levels generally rose during the late 1970s through the mid-1980s, but then began declining thereafter (Slade 1990). Groundwater flows toward the channel of the Santa Clara River and then westward. The experience of some private well owners in this area indicates declining groundwater well levels and, depending on location, in some cases wells running dry. In the instances of wells running dry, water has been trucked in to private water tanks to provide necessary water supplies to existing homes. Based on this response to groundwater pumping, use of wells in this area will be expected to continue to have local difficulty, especially during locally dry periods. This condition is particularly evident if several decades of predominantly below-normal rainfall years were to occur in the future such as occurred during much of the five decades from the mid-1920s through the mid-1970s. In other words, local conditions in the alluvium and terrace deposits in the eastern end of the Planning Area can be expected to repeat historical groundwater level declines necessitating alternative means of water service (e.g., trucking in water).

Regarding the effects of climate change on the use of private wells in this area, using the information presented in the 2009 Basin Yield Update prepared for the East Subbasin to the west, while future conditions cannot be projected with any degree of certainty, the range of potential climate change impacts extends from a possible wet trend to a possible dry trend over the long term. The trends that range from an approximate continuation of historical average precipitation, to something wetter than that, would appear to result in the possible recovery of impacted wells, with the intermittent constraints on full pumping in this area already occurring. The potential long-term dry trend arising out of climate change could further decrease local recharge to the point that lower and declining groundwater levels, beyond

what is already occurring in this area, would exacerbate the apparent unsustainability for groundwater production.

## ***Groundwater Water Quality***

### **Overview**

The groundwater quality of the Alluvial aquifer and the Saugus Formation consistently meets drinking water standards set by the U.S. Environmental Protection Agency (U.S. EPA) and the Department of Public Health (DPH). The water is delivered by the local retail purveyors in the CLWA service area for domestic use without treatment, although the water is disinfected by the retail purveyors prior to delivery. Existing water quality conditions for urban water uses in the CLWA service area are documented in the Santa Clarita Valley Water Quality Reports. The latest report is the 2010 Santa Clarita Valley Water Report. This report provides the cumulative results of thousands of water quality tests performed each year in the Santa Clarita Valley on CLWA's and the local purveyors' water supplies.

An annual Consumer Confidence Report (CCR) also is provided to all Santa Clarita Valley residents who receive water from the local retail water purveyors in the CLWA service area. The latest CCR is the 2007 Santa Clarita Valley Consumer Confidence Report. In that report, there is detailed information about the results of the testing of groundwater quality and treated SWP water supplied to the residents of the Santa Clarita Valley. Water quality regulations are constantly changing as contaminants that are typically not found in drinking water are discovered and new standards are adopted. In addition, existing water quality standards are becoming more stringent in terms of allowable levels in drinking water. However, all groundwater produced by the retail water purveyors in the Santa Clarita Valley meets or exceeds stringent drinking water quality regulations set by US EPA, the DPH, and the continuing oversight of the California Public Utilities Commission (CPUC).

### **Groundwater Quality – Alluvium**

Groundwater quality is, of course, a key factor in assessing the Alluvial aquifer as a municipal and agricultural water supply. Groundwater quality details and long-term conditions, examined by integration of individual records from several wells completed in the same aquifer materials and in close proximity to each other, have been discussed in previous annual Water Reports and in the 2005 UWMP. There were some changes in groundwater quality in 2009 that reflect fluctuations, trends, or other groundwater quality conditions as illustrated in 2009 Water Report Figures 3-11 and 3-12. These graphs show historical specific conductance values for representative wells in the Valley with the California Department of Public Health Secondary Maximum Levels included for reference. Most of the trends show a significant lowering of the specific conductance values by half following the wet years of 2004-

2005. Since then, those trends have returned to 2004 levels but do not exceed historical levels. In summary, those conditions include: no long-term overall trend and, most notably, no long-term decline in Alluvial groundwater quality; a general groundwater quality “gradient” from east to west, with lowest dissolved mineral content to the east, increasing in a westerly direction; and periodic fluctuations in some parts of the basin, where groundwater quality has inversely varied with precipitation and stream flow. Those variations are typically characterized by increased mineral concentrations through dry periods of lower stream flow and lower groundwater recharge, such as is currently occurring, followed by lower mineral concentrations through wetter periods of higher stream flow and higher groundwater recharge. The presence of long-term consistent water quality patterns, although intermittently affected by wet and dry cycles, supports the conclusion that the Alluvial aquifer remains a viable ongoing water supply source in terms of groundwater quality.

**Perchlorate.** The most notable groundwater quality issue in the Alluvium is perchlorate contamination. In 2002, one Alluvial production well owned by SCWD (Stadium Well), located near the former Whittaker-Bermite site, was inactivated for municipal water supply due to detection of perchlorate slightly below the Notification Level.<sup>14</sup> SCWD has recently drilled a replacement well (Valley Center Well) further to the east, north-northeast of the former Whittaker-Bermite site in a non-impacted portion of the basin. As a result, the Valley Center Well capacity is part of the purveyors’ operating plan.

Three wells with perchlorate concentrations exceeding the then-applicable Action Level (18 µg/l) or, more recently, the then-applicable Notification Level (6 µg/l) were removed from active water supply service. In early 2005, perchlorate was detected in a second Alluvial production well owned by Valencia Water Company (Well Q2). Valencia Water Company’s response was to remove the well from active water supply service and to rapidly seek approval for installation of wellhead treatment and return of the well to service. As part of outlining its plan for treatment and return of the well to service, Valencia Water Company analyzed the impact of the temporary inactivation of the well on its water supply capability; and the analysis determined that Valencia Water Company’s other sources are sufficient to meet demand and the inactivation of Well Q2 thus had no impact on Valencia Water Company’s water supply

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14 “Notification level” means the concentration level of a contaminant in drinking water delivered for human consumption that the state DPH has determined, based on available specific information, does not pose a significant health risk but warrants notification pursuant to applicable law. Notification levels are non-regulatory, health-based advisory levels established by the state DPH for contaminants in drinking water for which maximum contaminant levels have not been established. Notification levels are established as precautionary measures for contaminants that may be considered candidates for establishment of maximum contaminant levels, but have not yet undergone or completed the regulatory standard setting process prescribed for the development of maximum contaminant levels. Notification levels are not drinking water standards.

capability.<sup>15</sup> Valencia Water Company proceeded through mid-2005 to gain approval for installation of wellhead treatment (ion-exchange as described below), including environmental review, and completed installation of the wellhead treatment facilities in September 2005. Well Q2 was returned to active water supply service with wellhead treatment in October 2005. After nearly two years of operation with wellhead treatment, during which there was no detection of perchlorate, Valencia Water Company was authorized by DPH to discontinue wellhead treatment. Since that time, Well Q2 has been operated without wellhead treatment and without detection of perchlorate. As a result, Well Q2's capacity is part of the purveyors' operating plan. The other impacted wells remain out of service; two wells (VWC's Well 157 and SCWD's Stadium Well) have been sealed and replaced by new wells, and two wells (SCWD's Saugus 1 & 2 Wells) are being returned to service as described below.

Ongoing monitoring of all active municipal wells near the Whittaker-Bermite site has shown no detections of perchlorate in any active Alluvial wells. However, based on a combination of proximity to the Whittaker-Bermite site and prevailing groundwater flow directions, complemented by findings in the ongoing on-site and off-site investigations by Whittaker-Bermite and the Army Corps of Engineers (Corps), there is logical concern that perchlorate could impact nearby, down-gradient Alluvial wells (see, 2005 UWMP, Appendix D, in **Appendix 3.13**). As a result, provisions are in place to respond to perchlorate contamination if it should occur. The groundwater model was used to examine capture zones around Alluvial wells under planned operating conditions (pumping capacities and volumes) for the period through currently scheduled restoration of impacted wells in 2006.<sup>16</sup> The capture zone analysis of Alluvial wells generally near the Whittaker-Bermite site, shown on **Figure 3.13-6, Forecasted Two-Year Groundwater Capture Zones for Active Alluvial Production Wells Located Closest to the Whittaker-Bermite Property Santa Clarita, California**, suggests that inflow to those wells will either be upgradient of the contamination site, or will be from the Alluvium beyond where perchlorate is most likely to be transported, with the possible exception of the Valencia Water Company's Pardee wellfield, which includes Wells N, N7, and N8. Although the capture zone analysis does not show the Pardee wells to be impacted, they are considered to be at some potential risk due to the proximity of their capture zone to the Whittaker-Bermite site.

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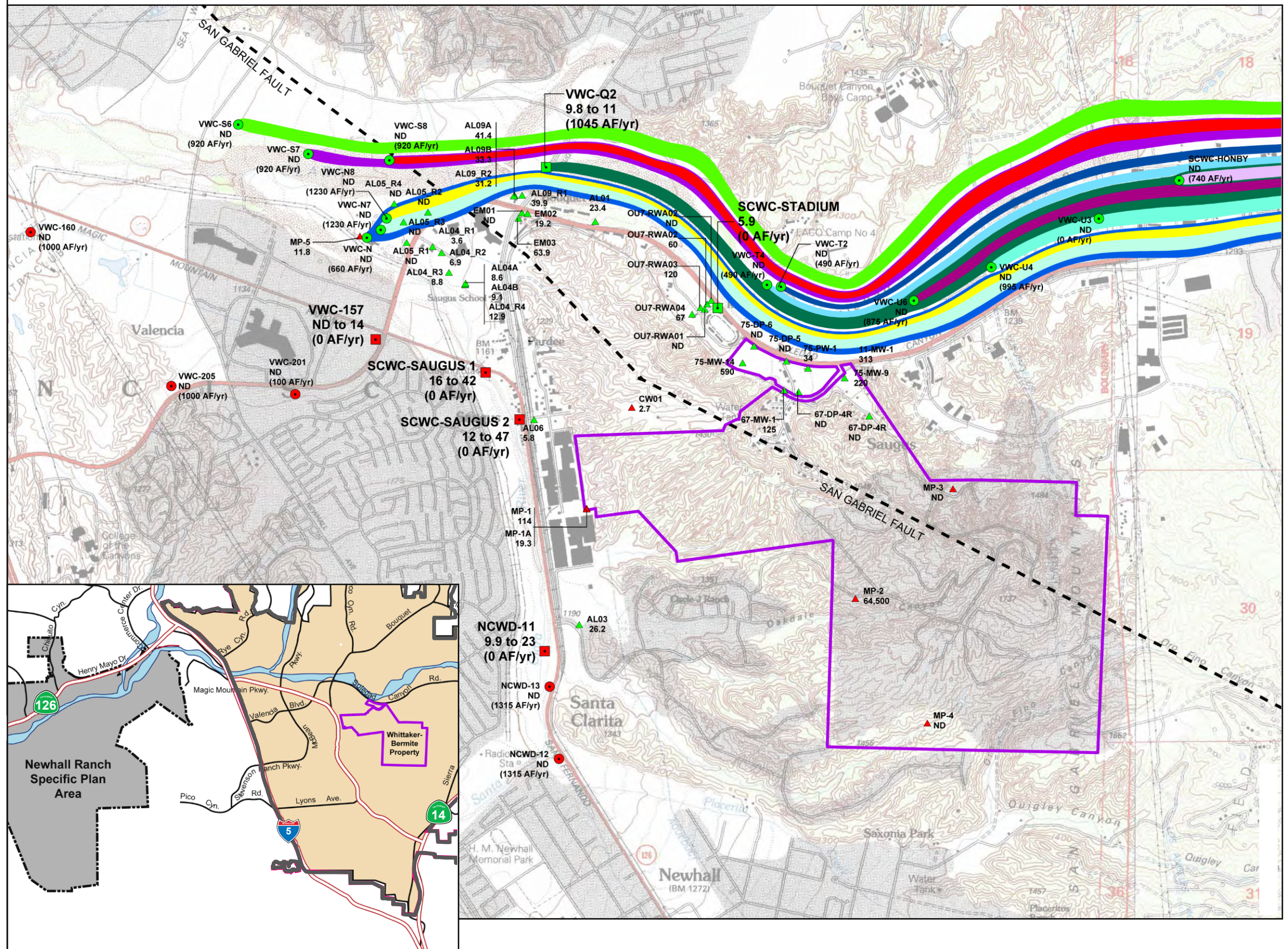
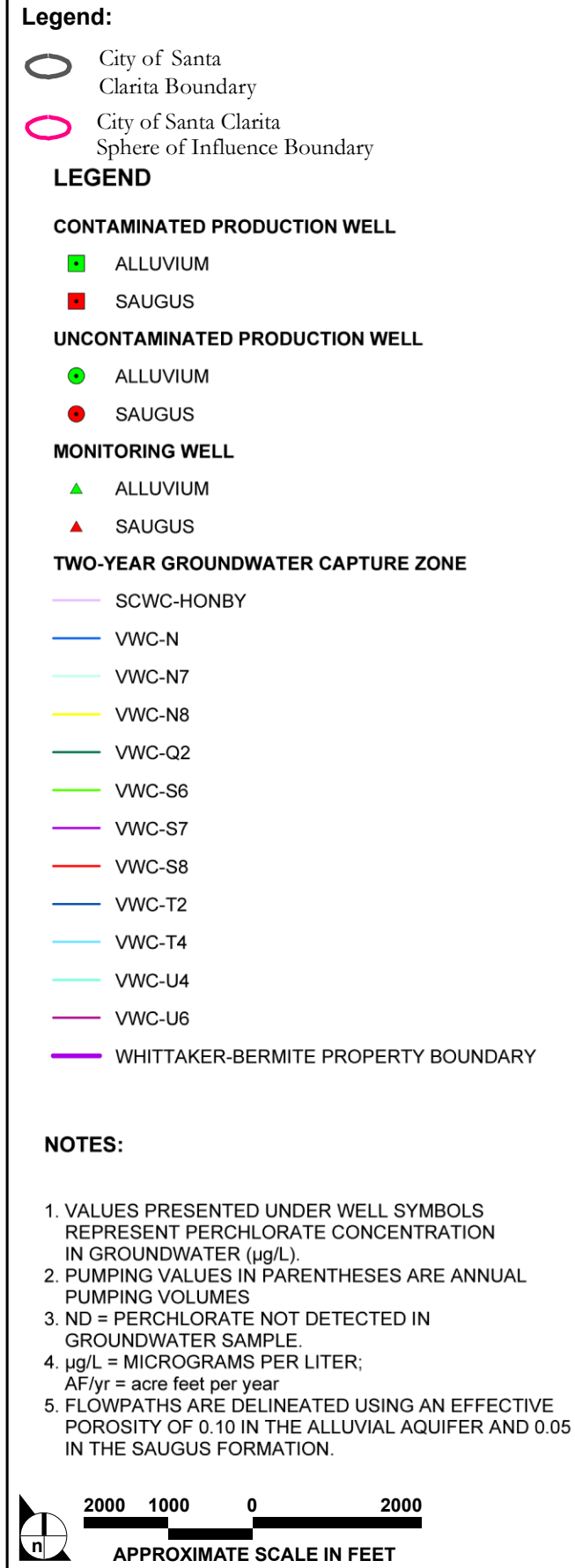
<sup>15</sup> See *Impact and Response to Perchlorate Contamination, Valencia Water Company, Well Q2*, prepared for Valencia Water Company by Luhdorff & Scalmanini Consulting Engineers, April 2005. This report is available for public review and inspection in EIR **Appendix 3.13**.

<sup>16</sup> See Technical Memorandum entitled, *Analysis of Near-Term Groundwater Capture Areas for Production Wells Located Near the Whittaker-Bermite Property (Santa Clarita, California)*, prepared by CH2MHill, for the Santa Clarita Valley Water Purveyors, December 21, 2004. This memorandum is available for public review and inspection in **Appendix 3.13** of this EIR.

The combined pumping capacity of Valencia Water Company's Pardee wells is 6,200 gallons per minute (gpm), which equates to about 10,000 af of maximum annual capacity. However, in the operating plan for both normal and dry year Alluvial pumping, the planned use of those wells represents 2,940 afy of the total 30,000 to 40,000 afy Alluvial groundwater supply. Thus, if the wells were to become contaminated with perchlorate, they would represent an amount of the total Alluvial supply that could be readily replaced, on a short-term interim basis, by utilizing an equivalent amount of imported water from CLWA or by utilizing existing capacity from other Alluvial wells (see, **Table 3.13-5**, above). Furthermore, if the Pardee wells were to become contaminated by perchlorate contamination, Valencia Water Company has made site provisions at its Pardee wellfield for installation of wellhead treatment. Such treatment would be the same as once installed at Valencia's Well Q2, and would result in the impacted Pardee wells being promptly returned to active service.

In 2009, additional significant progress has been made with respect to perchlorate remediation. For example, in September 2009, CLWA, in partnership with other local retail purveyors and the City of Santa Clarita, completed construction of CLWA's Rio Vista Intake Pump Station, which is CLWA's new perchlorate treatment facility. The facility is designed to restore groundwater production capacity impacted by perchlorate contamination and stop migration of perchlorate from the former Whittaker-Bermite site. The new plant is expected to be in use beginning spring 2010. Through constructed pipelines, perchlorate-impacted water from Saugus Wells 1 and 2 will be pumped and treated at the plant, restoring approximately 3,400 afy of groundwater. Pumping and treatment operations are expected to occur on a continuous basis for several years. The new facility will remove perchlorate from the groundwater using ion-exchange technology.





SOURCE: Luhdorff & Scalmanini Consulting Engineers – January 2006

FIGURE 3.13-6

Forecasted Two-Year Groundwater Capture Zones for Active Alluvial Production Wells Located Closest to the Whittaker-Bermite Property Santa Clarita, California



As of August 31, 2009, approximately 23 million gallons of perchlorate-impacted groundwater have been treated and discharged under the National Pollutant Discharge Elimination System (NPDES) permit authorizing such activities. Routine weekly and monthly NPDES sampling, treatment, and discharge is continuing in compliance with NPDES permit requirements. An additional 12 to 14 wells also are being installed on the Whittaker property to pump and treat contaminated perchlorate on site.

Additional perchlorate-related remediation activities continue to move forward at the former Whittaker-Bermite site. For example, soil remediation operations are continuing on site, including completion of the third draft Remedial Action Plan (RAP) for site-wide soils remediation. The revised draft RAP was submitted to Department of Toxic Substances Control (DTSC) on August 14, 2009. DTSC's preliminary review comments were incorporated and a revised draft RAP was resubmitted to DTSC on August 31, 2009. Groundwater and surface water issues also continue to be addressed and reported to DTSC. (See **Appendix 3.13** [Progress Letter Report from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, September 15, 2009].)

In short, work continues on multiple tasks to address groundwater contaminated by perchlorate stemming from past manufacturing activities on the former Whittaker-Bermite site. CLWA and the local retail purveyors are proceeding to restore the production capacity of the few remaining groundwater supply wells contaminated by perchlorate, while working on the objectives of containing the downgradient migration of perchlorate. For technical information regarding these up-to-date activities, please refer to the following documents in the Draft EIR, **Appendix 3.13**: (1) letter from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, June 8, 2009; (2) CLWA News Release, September 14, 2009; (3) Progress Letter Report from Hassan Amini, Ph.D., Project Coordinator for AMEC Geomatrix, to DTSC, September 15, 2009; and (4) CLWA Memorandum from Brian J. Folsom to CLWA Board of Directors, October 1, 2009.

### **Groundwater Quality – Saugus Formation**

As discussed above for the Alluvium, groundwater quality is a key factor in also assessing the Saugus Formation as a municipal and agricultural water supply. As with groundwater level data, long-term Saugus groundwater quality data are not sufficiently extensive to permit any sort of basinwide analysis or assessment of pumping-related impacts on quality. However, integration of individual records from several wells has been used to examine general water quality trends. Based on those records, water quality in the Saugus Formation has not historically exhibited the precipitation-related fluctuations seen in the Alluvium. Based on available data over the last 50 years, groundwater quality in the Saugus has exhibited a slight overall increase in dissolved mineral content as illustrated in 2009 Water Report Figure 3-13. More recently, several wells within the Saugus Formation have exhibited an additional increase in dissolved mineral content, similar to short-term changes in the Alluvium, possibly as a result of recharge to the Saugus Formation from the Alluvium. Since 2005, however, these levels have been steadily dropping or remaining constant. Dissolved mineral concentrations in the Saugus Formation remain below the Secondary (aesthetic) Upper Maximum Contaminant Level. Groundwater quality

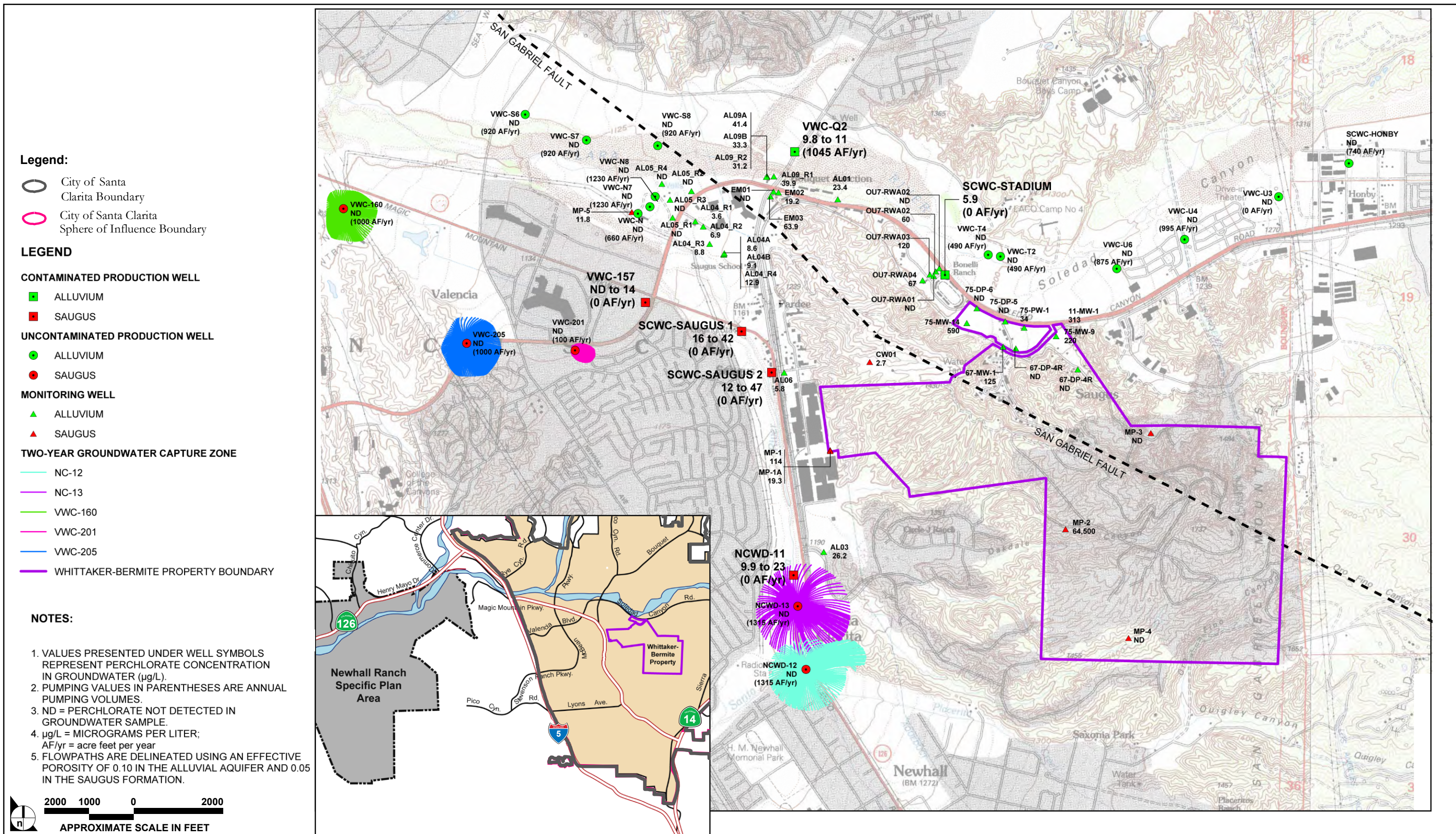
within the Saugus will continue to be monitored to ensure that degradation to the long-term viability of the Saugus as a component of overall water supply does not occur.

**Perchlorate.** As with the Alluvium, the most notable groundwater quality issue in the Saugus Formation is perchlorate contamination. Under oversight by the California Department of Toxic Substances Control (DTSC), and with ultimate approval by DPH, in accordance with its Policy 97-005 (for restoration of water supply from “severely impaired” water sources), the purveyors have developed a remedial strategy that entails pumping of two impacted wells for containment of perchlorate migration; treatment, and subsequent use of the pumped water for water supply; and installation of replacement wells in non-impacted portions of the basin to restore the remainder of groundwater supply impacted by perchlorate. A noteworthy detail of these activities is that the groundwater flow model was used to identify the design of a pumping scheme that would meet the purveyors’ objectives for perchlorate containment in the Saugus Formation (see **Appendix 3.13** [2009 Basin Yield Update, p. III-7]).

The final containment plan specifies that wells SCWD-Saugus 1 and SCWD-Saugus 2 operate at an instantaneous pumping rate of 1,200 gpm at each well (for a combined total of 2,400 gpm from the two wells). The annual pumping volume of 1,772 afy per well is based on this rate and also on the assumption that pumping will occur continuously, except for up to four weeks per year for maintenance purposes. Construction of facilities and pipelines necessary to implement the containment program and to restore inactivated well capacity was completed, and in operational startup, at the time of this writing.

Under the direction of DTSC, Whittaker has submitted a comprehensive site wide remediation plan for the contaminants of concern in soil and groundwater detected on the property. A Draft Remedial Action Plan for Operable Units 2 through 6 that is focused on soil remediation was submitted to DTSC in 2009. The plan contains a number of recommended technologies to remove contaminants from the soil, in addition to a proposed cleanup schedule for the site. Whittaker has also completed a Draft Operable Unit 7 Feasibility Study to identify and select treatment technologies for both on-site and off-site groundwater. Final approval by DTSC of soil and groundwater cleanup plans is expected by the end of 2010. The question of whether existing active Saugus wells are likely to be contaminated by perchlorate migration prior to the installation of treatment and pumping for perchlorate contamination control has been evaluated by using the groundwater flow model to analyze capture zones of existing active wells through 2006, the scheduled period for permitting, installation of treatment, and restoration of impacted capacity. For that analysis, recognizing current hydrologic conditions and available supplemental SWP supplies, the rate of Saugus pumping was conservatively projected to be in the normal range (7,500 to 15,000 afy) for the near-term. The results of the capture zone analysis, illustrated on **Figure 3.13-7, Forecasted Two-Year Groundwater Capture Zones for Active Saugus Production Wells Located Closest to the Whittaker-Bermite Property Santa Clarita, California**, were that the two nearest downgradient Saugus wells, Valencia Water Company’s Wells 201 and 205, would draw water from very localized areas around the wells and would not draw water from locations where perchlorate has been detected in the Saugus Formation.







As shown on the figure, the capture zone analysis projected Well 201 would potentially draw Saugus groundwater from areas located up to 450 feet east of the well, but was unlikely to draw water from areas farther to the east through that period. During the same time, Well 205 would potentially draw Saugus groundwater from areas as much as 650 feet to the east and northeast of this well.

As a result, the currently active downgradient Saugus wells are expected to remain active as sources of water supply in accordance with the overall operating plan for the Saugus Formation, given the generally low planned pumping from the nearest downgradient Saugus wells in the operating plan through 2006, after which restored capacity and resultant aquifer hydraulic control are scheduled to be in place.

### **Groundwater – East of the CLWA Service Area**

Similar to data regarding groundwater levels in the eastern portion of the Planning Area, groundwater quality information is also limited. DWR's Bulletin 118 indicates that groundwater in the basin is generally calcium bicarbonate in character. However, in the broad valley north of Acton, two wells have calcium-magnesium sulfate character and nine wells have calcium magnesium bicarbonate character (Slade 1990). Water sampled from five public supply wells in the basin show an average TDS content of approximately 579 mg/L and a range of 424 to 712 mg/L. TDS content ranged from 279 to 480 mg/L during June 1988 through July 1989 (Slade 1990). Water sampled from 75 wells measured during 1989 show high concentrations of TDS, sulfate, and chloride in the northern part of the basin with some of these concentrations exceeding drinking water standards (Slade 1990; DWR 1993). The water from two wells in the basin have nitrate concentrations that exceed drinking [past] water standards (DWR 1968).

### **Perchlorate Treatment Technology**

Effective technologies presently exist to treat perchlorate in water in order to meet drinking water standards. In a publication from the U.S. EPA, *Region 9 Perchlorate Update*,<sup>17</sup> the U.S. EPA discussed the current state of perchlorate treatment technology, and the current and planned treatment development efforts being carried out as part of U.S. EPA Superfund program studies, U.S. Air Force research, water utility-funded studies, and the federally funded research effort underway by the East Valley Water District, California and the American Water Works Association Research Foundation (AWWARF). The U.S. EPA also summarized two of the technologies that are in use today, which are capable of removing perchlorate from groundwater supplies: the ion exchange and biological treatment methods.

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<sup>17</sup> See U.S. EPA Internet website, *Perchlorate*, and *Region 9 Perchlorate Update*, found at <http://www.epa.gov/ogwdw/ccl/perchlor/perchlo.html>, and included in **Appendix 3.13** of this EIR.

A number of full-scale perchlorate treatment systems have been implemented in California and other states. In an effort to evaluate the various available treatment technologies, CLWA commissioned an investigation to identify and evaluate alternative treatment processes effective in removing perchlorate. The scope of that investigation included resolving permitting issues pertaining to the construction and certification of a treatment facility, conducting bench-scale and pilot-scale tests to determine treatment process performance, and preparing preliminary capital and operations and maintenance cost estimates.

Three treatment technologies, an ion exchange system and two biological systems, were selected for study. All three systems were determined to be effective in removing perchlorate.<sup>18</sup> However, there was considerable uncertainty with respect to the capital and operations and maintenance costs associated with each process. Therefore, a technical group comprised of representatives from CLWA, the retail water purveyors, and consultants retained by Whittaker-Bermite agreed to solicit competitive bids for the design, construction, and operation of both ion exchange and biological treatment systems. After thorough evaluation of several bids, the technical group determined that ion exchange is the preferred technology based upon treatment performance, ease of regulatory compliance, and comparison of costs associated with construction and operations and maintenance.

The preferred single-pass ion exchange treatment technology does not generate a concentrated perchlorate waste stream that would require additional treatment before discharge to a sanitary sewer or a brine line (if one is available). This technology incorporates an active resin (a material that attracts perchlorate molecules) that safely removes the perchlorate from water. The resin is contained in pressure vessels and the water is pumped through the vessel. The resin is eventually replaced with new resin after a period of time. The old resin is removed and transported by truck to an approved waste disposal site where it is safely destroyed. This technology is robust and reliable for use in drinking water systems.

DPH has approved operation of perchlorate treatment plants, and those plants currently in operation are listed in **Table 3.13-7, Perchlorate Treatment Summary**.

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<sup>18</sup> See *Treatment of Perchlorate Contaminated Groundwater from the Saugus Aquifer, TM 3 Bench and Pilot Test Results*, Carollo Engineers, February 2004. A copy of this report is available for public review and inspection in **Appendix 3.13** of this EIR.

**Table 3.13-7**  
**Perchlorate Treatment Summary**

<b>Location</b>	<b>Treatment Plant Capacity (gallons per minute)</b>	<b>Concentration of Perchlorate in Groundwater (parts per billion)</b>	<b>Concentration of Perchlorate after Treatment (parts per billion)</b>
1) Valencia Water Company (Santa Clarita Valley – Well Q2)	1,300	<11	ND
2) La Puente Valley County Water District (Baldwin Park)	2,500	<200	ND
3) San Gabriel Valley Water Company (El Monte)	7,800	<80	ND
4) Lincoln Avenue Water Company (Altadena)	2,000	<20	ND
5) City of Riverside	2,000	<60	ND
6) City of Rialto	2,000	<10	ND
7) City of Colton	3,500	<10	ND
8) Fontana Union Water Company	5,000	<15	ND

ND = non-detect. The non-detect level represents concentrations less than 4 parts per billion.

Source: Perchlorate Contamination Treatment Alternatives, prepared by the Office of Pollution Prevention and Technology Development, DTSC, California Environmental Protection Agency, Draft January 2004.

Based on (1) the results of CLWA's investigation of perchlorate removal technologies, (2) the technical group's evaluation, and (3) DPH approval of single-pass ion exchange for treatment in other settings, CLWA and the local retail water purveyors are planning single-pass ion exchange for the treatment technology for restoration of impacted capacity (wells) in accordance with the permitting, testing, and installation process described in the 2005 UWMP. The wellhead treatment installed at Valencia Water Company's Well Q2 in October 2005 is the same single-pass ion exchange as is planned for restoration of impacted Saugus well capacity.

### **Groundwater Pollutants of Concern**

Research conducted on the effects on groundwater from stormwater infiltration by Pitt et al. (1994) indicate that the potential for contamination is dependent on a number of factors, including the local hydrogeology and the chemical characteristics of the pollutants of concern. Chemical characteristics that influence the potential for groundwater impacts include high mobility (low absorption potential), high solubility fractions, and abundance in runoff and dry weather flow. As a class of constituents, trace metals tend to adsorb onto soil particles and are filtered out by the soils. This has been confirmed by



extensive data collected beneath stormwater detention/retention ponds in Fresno (conducted as part of the Nationwide Urban Runoff Program) that showed trace metals tended to be adsorbed in the upper few feet in the bottom sediments. Bacteria also are filtered out by soils. More mobile constituents, such as chloride and nitrate, would have a greater potential for infiltration.

The pollutants of concern for the groundwater quality analysis are those that are anticipated or that have the potential to be generated by the land uses associated with OVOV land uses. The pollutants specific to each land use have been identified based on water quality data collected in Los Angeles County. Pollutants generated by development have the potential to impact groundwater via infiltration of runoff in PDF, direct infiltration of irrigation water and stormwater, exfiltration or seepage from sewers, septic tanks or stormwater drains, and direct discharges of treated wastewater to the Santa Clara River.

**Nitrate.** Nitrate+nitrite-N is a pollutant of concern for purposes of evaluating groundwater quality impacts based upon the potential use of nitrogen fertilizers and nitrates high mobility in groundwater.

**Bacteria.** The Basin Plan contains numeric criteria for bacteria in drinking water sources. Bacteria are not highly mobile in groundwater and are easily removed through filtration in soils (for example, as with septic tank discharges). Bacteria in stormwater originating from pets and wildlife is not expected to exceed the numeric criteria and, therefore, is not a pollutant of concern.

**Taste and Odor.** The Basin Plan contains a narrative objective for taste and odors that cause a nuisance or adversely affect beneficial uses. Undesirable tastes and odors in groundwater may be a nuisance and may indicate the presence of a pollutant(s). Odor associated with water can result from natural processes, such as the decomposition of organic matter or the reduction of inorganic compounds, such as sulfate. Other potential sources of odor causing substances, such as industrial processes, will not occur as part of the proposed project. Therefore, taste and odor-producing substances are not pollutants of concern for the proposed project.

**Mineral Quality: TDS, Sulfate, Chloride, and Boron.** Mineral quality in groundwater is largely influenced by the mineral assemblage of soils and rocks that it comes into contact with. Elevated mineral concentrations could impact beneficial uses; however, the minerals listed in the Basin Plan are not believed to be pollutants of concern due to the anticipated runoff concentrations and the typical mineral concentrations in irrigation water (Castaic Lake Water Agency), which are below the Basin Plan objectives (**Table 3.13-8, Comparison of Basin Plan Mineral Groundwater Objectives with Mean Measured Values in Los Angeles County and SWP Water Quality at Castaic Lake**). Therefore, these constituents are not considered pollutants of concern for the proposed project.

**Table 3.13-8**  
**Comparison of Basin Plan Mineral Groundwater Objectives with Mean Measured Values in**  
**Los Angeles County and SWP Water Quality at Castaic Lake**

Mineral	Los Angeles Basin Plan Groundwater Quality Objective <sup>1</sup> (mg/L)	Range of Mean Concentrations in Urban Runoff <sup>2</sup> (mg/L)	Typical Concentration in CLWA Water <sup>3</sup> (mg/L)
Total Dissolved Solids	700	53 – 237	279
Sulfate	250	7 – 35	57
Chloride	100	4 – 50	47

<sup>1</sup> Santa Clara-Bouquet and San Francisquito Canyons Subbasin

<sup>2</sup> Source: Los Angeles County, 2000. Includes all monitored land uses.

<sup>3</sup> Source: The Santa Clarita Valley Water Quality Report (2008)

### Other Groundwater Quality Issues

**Methyl-Tertiary Butyl Ether (MTBE).** MTBE has been a concern for the past several years, and on May 17, 2000, DPH adopted a primary maximum contaminant level (MCL) for MTBE of 0.013 mg/L. CLWA and the local retail purveyors have been testing for MTBE since 1997 and, to date, have not detected it in any of the production wells.

**Total Trihalomethanes (TTHMs).** In 2002, the US EPA implemented the new Disinfectants and Disinfection Byproducts Rule. In part, this rule establishes a new MCL of 80 µg/L (based on an annual running average) for TTHM. TTHMs are byproducts created when chlorine is used as a means for disinfection. In 2005, CLWA and the local retail purveyors implemented an alternative method of disinfection, chloramination, to maintain compliance with the new rule and future regulations relating to disinfection byproducts.<sup>19</sup> TTHM concentrations have remained significantly below the MCL since implementation of the alternative disinfection method.

**Arsenic.** The US EPA revised the federal MCL for arsenic from 50 µg/l to 10 µg/l. Naturally occurring arsenic has historically only been detected at concentrations of less than 5 µg/l in local groundwater supplies and at concentrations of less than 3 µg/l in SWP water supplies. The analytical results for arsenic for most groundwater wells in the Valley have been non-detect where the detection limit was 2 µg/l (Luhdorff and Scalmanini, 2004).

<sup>19</sup> See EPA site: [http://www.epa.gov/region09/water/drinking/files/dwsha\\_0607.pdf](http://www.epa.gov/region09/water/drinking/files/dwsha_0607.pdf).

### *Santa Clara River*

The Memorandum of Understanding (MOU) between the Santa Clarita Valley Purveyors and the United Water Conservation District, which manages surface and groundwater resources in seven groundwater basins in the Lower Santa Clara River Valley Area, was a significant accomplishment when it was prepared and executed in 2001. The MOU initiated a collaborative and integrated approach to data collection; database management; groundwater flow modeling; assessment of groundwater basin conditions, including determination of basin yield amounts; and preparation and presentation of reports, including continued annual reports such as this one for current planning and consideration of development proposals, and also including more technically detailed reports on geologic and hydrologic aspects of the overall stream aquifer system. Meetings of the MOU participants have continued, and integration of the Upper (Santa Clarita Valley) and Lower (United Water Conservation District [UWCD]) Santa Clara River databases has been accomplished. As discussed above, a numerical groundwater flow model of the entire Santa Clarita groundwater basin was developed and calibrated in 2002–2004. Subsequent to its initial use in 2004 for assessing the effectiveness of various operating scenarios to restore pumping capacity impacted by perchlorate contamination (by pumping and treating groundwater for water supply while simultaneously controlling the migration of contaminated groundwater), the model was used in 2005 for evaluation of basin yield under varying management actions and hydrologic conditions. The results completed the determination of sustainable operating yield values for both the Alluvium and the Saugus Formation, which were incorporated in the 2005 UWMP. The updated analysis of basin yield, completed in 2009, indicates that the 2008 Operating Plan will maintain river flows at higher levels than occurred prior to urbanization of the Valley.

On occasion, issues have been raised about whether use and management of groundwater in the Santa Clarita Valley have adversely impacted surface water flows into Ventura County. Part of the groundwater modeling work has addressed the surface water flow question as well as groundwater levels and storage. While the sustainability of groundwater has logically derived primarily from projected long-term stability of groundwater levels and storage, it has also derived in part from modeled simulations of surface water flows and the lack of streamflow depletion by groundwater pumping. In addition, the long-term history of groundwater levels in the western and central part of the basin, as illustrated in 2009 Water Report Figures 3-4 and 3-5, supports the modeled analysis and suggests that groundwater has not been lowered in such a way as to induce infiltration from the river and thus impact surface water flows.

Historical annual stream discharge in the Santa Clara River, into and out of the Santa Clarita Valley, is shown on 2009 Water Report Figure 3-14. The upstream gauge at Lang Station was reinstated in 2002 and shows a wide range of average annual inflow over the last seven years. The downstream gauge was

moved in 1996 to its present location near Piru, about 2 miles downriver from the former County Line Gauge. The combined record (1953–2009) of these two downstream gauges indicates an annual stream discharge of about 47,000 afy. These data gauged near the County line show notably higher flows from the Santa Clarita Valley into the uppermost downstream basin, the Piru Basin, over the last 30 to 35 years.

### ***Imported Water Supplies***

#### **State Water Project and Associated Facilities**

The SWP is a water supply, storage, and distribution system that includes 28 storage facilities, reservoirs, and lakes; 20 pumping plants; six pumping-generating plants and hydroelectric power plants; and about 660 miles of aqueducts and pipelines.<sup>20</sup> Principal SWP facilities are shown on **Figure 3.13-8**.

**Summary Description.** In the southern Sacramento-San Joaquin Delta (Delta), water is pumped into the 444-mile-long California Aqueduct at the Clifton Court Forebay by the Banks Pumping Plant (or by agreement with the U.S. Bureau of Reclamation, at the Central Valley Project's (CVP) Tracy Pumping Plant). From the southern Delta facilities, water in the California Aqueduct travels along the west side of the San Joaquin Valley and is delivered directly to SWP Contractors or is stored in San Luis Reservoir, the SWP's main storage facility south of the Delta. Water is conveyed via the California Aqueduct to the urban region of the Bay area, and south of San Luis Reservoir, to the primarily agricultural regions in the San Joaquin Valley and the primarily urban regions of the Central Coast and Southern California. Water is diverted from the California Aqueduct and delivered directly to SWP Contractors in the central and southern San Joaquin Valley at various locations along the California Aqueduct. The California Aqueduct traverses the west side of the San Joaquin Valley, and water is pumped through a series of four pumping plants (Dos Amigos, Buena Vista, Teerink, and Chrisman) before reaching the Edmonston Pumping Plant. The Edmonston Pumping Plant pumps water over the Tehachapi Mountain Range, and the California Aqueduct then divides into the East Branch and the West Branch. Water intended for use by CLWA is conveyed through the West Branch to Quail and Pyramid Lakes and then to Castaic Lake, the terminus for the West Branch.

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<sup>20</sup> Bulletin 132-06, Management of the California State Water Project (December 2007), is the most recent published data by DWR describing the status of SWP operations and water deliveries to SWP Contractors. Because Bulletin 132-06 covers SWP activities through calendar year 2005, some of the SWP delivery information presented in this EIR is through calendar year 2005, which is the latest year available. (See this EIR, **Appendix 3.13** [Bulletin 132-06, Management of the California State Water project (December 2007)].)

**SWP Operations, Deliveries, and Constraints.** In the early 1960s, DWR began entering into individual water supply contracts with various urban and agricultural public water supply agencies (i.e., SWP Contractors). The total planned annual delivery capability of the SWP and the sum of all SWP Contractors' maximum Table A<sup>21</sup> amounts specified in the water supply contracts were approximately 4.2 million acre-feet (maf). The initial SWP storage facilities were designed to meet SWP Contractors' water demands in the early years of the project, with construction of additional storage facilities planned as demands increased. Conveyance facilities were generally designed and constructed to deliver full Table A Amounts to SWP Contractors. Water deliveries to SWP Contractors began as initial SWP facilities were completed in the late 1960s and early 1970s; however, no additional SWP storage facilities have been constructed since that time. (See **Appendix 3.13** [DWR Bulletin 132-06, Management of the California State Water Project, December 2007].)

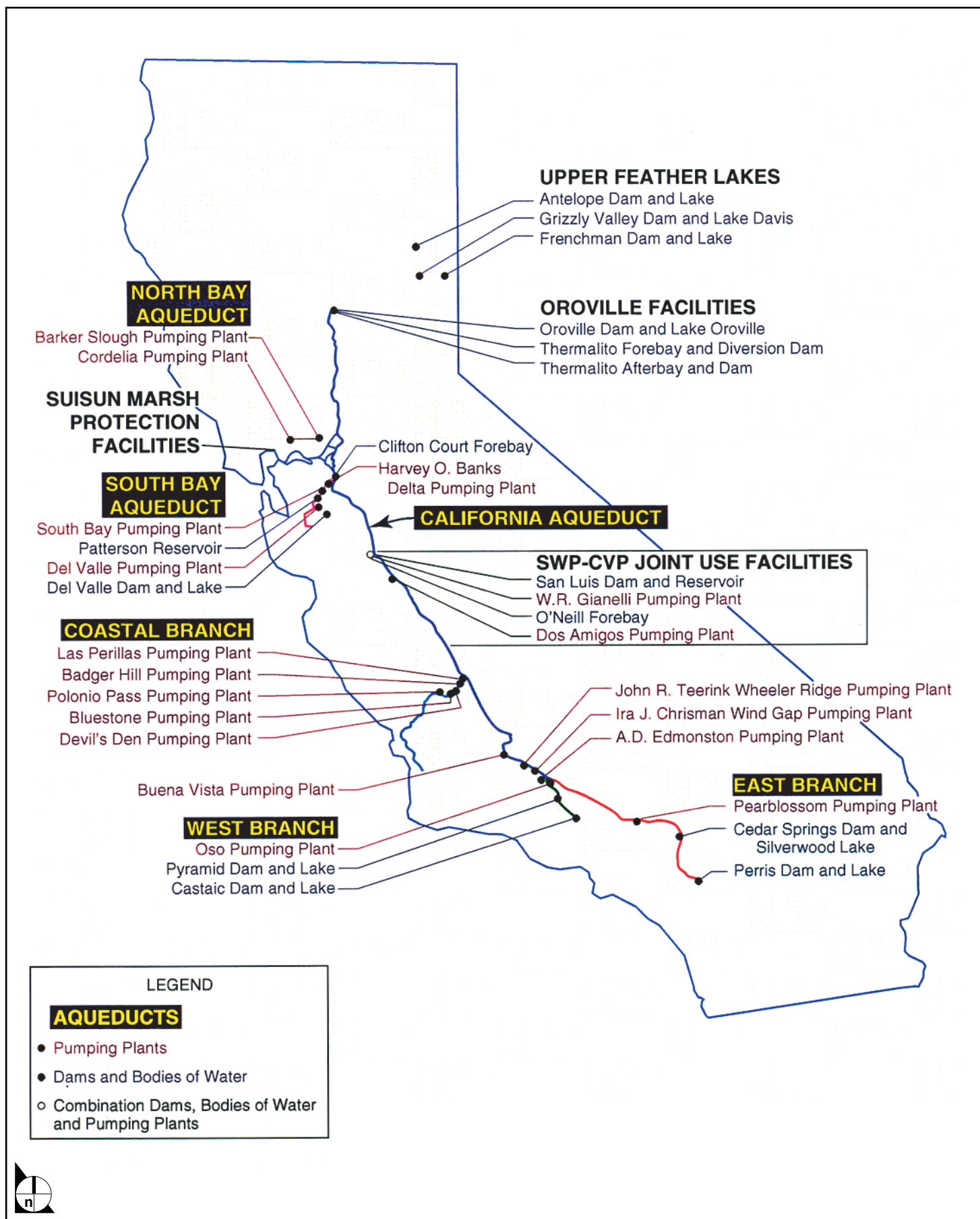
From 1990 to 2003, actual SWP annual deliveries of Table A supplies to SWP Contractors ranged from approximately 550,000 af in 1991 to approximately 3.2 maf in 2000 and 2003 (excluding Article 21 deliveries). The amount of water DWR determines is available and allocates for delivery in a given year is based on that year's hydrologic conditions, the amount of water in storage in the SWP system, current regulatory, operational, and environmental constraints, the SWP Contractors' requests for SWP supplies, and other factors. These factors can significantly alter and reduce the availability of SWP water in any given year. Since historically low SWP Contractor demands have limited deliveries in wetter years when additional supplies were available, historic deliveries only provide an indication of actual SWP delivery capability in supply limited dry years.

To determine the SWP delivery capability under current and future conditions, DWR uses a computer model (currently, CALSIM II) that simulates operations of the SWP and CVP. DWR's most recently published estimates of SWP delivery reliability are included in DWR's State Water Project Delivery Reliability Report, August 2010 (2009 DWR Delivery Reliability Report).<sup>22</sup>

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<sup>21</sup> Table A is used to define each contractor's portion of the available water supply that DWR will allocate and deliver to each contractor.

<sup>22</sup> A copy of this report is incorporated into this EIR by reference and is available for public review on the State's website at, <http://baydeltaoffice.water.ca.gov>.



SOURCE: DWR (1997a)

FIGURE 3.13-8

## Principal State Water Program Facilities

As background, DWR has assessed the impact of various conditions on SWP supply reliability since 2003. (See DWR Reliability Report, May 2003). The report assisted SWP contractors in assessing the reliability of the SWP component of their overall supplies. DWR subsequently issued its 2005 SWP Delivery Reliability Report (April 2006). This updated analysis estimated that the SWP, using existing facilities operated under current regulatory and operational constraints, and with all contractors requesting delivery of their full Table A Amounts in most years, could deliver 77 percent of total Table A Amounts on a long-term average basis. The 2005 UWMP's discussion of SWP supply reliability is based on the analysis contained in the DWR 2005 Delivery Reliability Report, April 2006. Since that time, DWR released the 2007 Delivery Reliability Report (August 2008) and the 2009 DWR Delivery Reliability Report (August 2010). The 2007 Delivery Reliability Report estimated that the SWP, with all contractors requesting delivery of their full Table A Amounts in most years, could deliver 66 to 69 percent of total Table A Amounts on a long-term average basis.

The 2009 DWR Delivery Reliability Report updated the 2007 Delivery Reliability Report (DWR released a draft of the 2009 DWR Delivery Reliability Report for public review and comment on January 26, 2010). The latest report updates estimates of the current (2009) and future (2029) SWP delivery reliability and incorporates regulatory requirements for SWP and Central Valley Project (CVP) operations in accordance with a U.S. Fish and Wildlife Service biological opinion for the Delta smelt (December 2008) and a National Marine Fisheries Service biological opinion for salmon (June 2009). Estimates of future SWP delivery reliability also reflect potential impacts of climate change, sea level rise and the vulnerability of Delta levees to failure due to floods and earthquakes.

The 2009 DWR Delivery Reliability Report represents the state of water affairs if no actions for improvement are taken. It shows continued erosion of SWP water delivery reliability under the current method of moving water through the Delta. The updated analysis shows that the primary component of the annual SWP deliveries (referred to as Table A deliveries) will be less under current and future conditions, when compared to the preceding report (*2007 DWR Delivery Reliability Report*). As in previous reports, estimates of SWP deliveries are based upon operation simulations with DWR's CalSim II model using an extended record of runoff patterns. These patterns have been adjusted to reflect the levels of development in the source areas and, for future conditions, possible impact due to climate change and accompanying sea level rise. Potential deliveries under current conditions are estimated at the 2009 level and assume current methods of conveying water across the Delta and the current operational rules contained in the federal biological opinions. Potential deliveries under future conditions are estimated at the 2029 level and are also based on the assumptions that no changes will be made in either the way water is conveyed across the Delta or in the operational rules. The analysis of future conditions incorporates a climate change scenario from DWR's 2009 report, *Using Future Climate Projections to Support Water Resources Decision Making in California*, which represents the median effects of the



12 scenarios contained in the report (this report is incorporated by reference and is available on the state's Web site, at <http://www.energy.ca.gov/2009publications/CEC-500-2009-052/CEC-500-2009-052-D.PDF>). The 2009 draft report shows greater reductions in water deliveries on average when compared to the 2007 report. The 2007 report incorporates the interim operation rules established by Judge Wanger in the federal court in 2007. It shows very significant reductions in SWP deliveries when compared to the 2005 report, which assumes operation rules that were less restrictive. The 2007 report shows current SWP annual Table A deliveries averaging 63 percent (2595 thousand acre-feet [taf]) of the maximum contract amount of 4,133 taf per year. The 2009 report shows a corresponding value of 60 percent (2485 taf). The 2007 report projects an annual average of 66 to 69 percent (2725-2850 taf) for the future condition, whereas the updated report has 60 percent.

The 2009 DWR Delivery Reliability Report (August 2010) included the information presented in **Table 3.13-9, Average And Dry Period SWP Table A Deliveries From The Delta Under Current Conditions**, and **Table 3.13-10, Average And Dry Period SWP Table A Deliveries From The Delta Under Future Conditions**, below, which provide average and dry period estimated deliveries for current conditions (2009) and future conditions (2029), and compares those figures to those in the 2007 DWR Delivery Reliability Report.

As shown, under the updated Future Conditions (2029), average SWP delivery amounts may decrease from 6 to 9 percent of maximum Table A Amounts as compared to earlier estimates in the 2007 DWR Delivery Reliability Report. This decrease in reliability results in an estimated average delivery of 60 percent versus 66 percent to 69 percent as identified in the 2007 DWR Delivery Reliability Report).

**Table 3.13-9**  
**Average And Dry Period SWP Table A Deliveries from The Delta Under Current Conditions**

SWP Table A Delivery from the Delta (in percent of maximum Table A <sup>1</sup> )						
Study of Current Conditions	Long-term Average <sup>2</sup>	Single dry-year (1977)	2-year drought (1976–1977)	4-year drought (1931–1934)	6-year drought (1987–1992)	6-year drought (1929–1934)
2007 DWR Delivery Reliability Report, Study 2007	63%	6%	34%	35%	35%	34%
2009 DWR Delivery Reliability Report, 2009 Studies <sup>3</sup>	60%	7%	36%	34%	35%	34%

*Notes:*

<sup>1</sup> Maximum Table A Amount is 4,133 thousand acre-feet/year.

<sup>2</sup> 1922-2003 for Update with 2007 and 2009 studies.

<sup>3</sup> Values reflect averaging annual deliveries from the two scenarios of Old and Middle River flow targets described in the Final State Water Project Delivery Reliability Report, 2009.

Source: DWR Final State Water Project Delivery Reliability Report, 2009.

**Table 3.13-10**  
**Average And Dry Period SWP Table A Deliveries From The Delta Under Future Conditions**

SWP Table A Delivery from the Delta (in percent of maximum Table A <sup>1</sup> )						
Study of Future Conditions	Long-term Average <sup>2</sup>	Single dry-year (1977)	2-year drought (1976–1977)	4-year drought (1931–1934)	6-year drought (1987–1992)	6-year drought (1929–1934)
2007 DWR Delivery Reliability Report, Study 2027	66-69%	7%	26-27%	32-37%	33-35%	33-36%
2009 DWR Delivery Reliability Report, Study 2029 <sup>3</sup>	60%	11%	38%	35%	32%	36%

*Notes:*

<sup>1</sup> Maximum Table A Amount is 4,133 thousand acre-feet/year.

<sup>2</sup> 1922–2003 for 2007 and 2009 DWR Delivery Reliability Reports with 2027 and 2029 studies.

<sup>3</sup> Range in values reflects four modified scenarios of climate change: annual Table A deliveries were first interpolated between full 2050 level and no climate change scenarios, then averaged over the two scenarios of Old and Middle River flow targets.

Source: DWR Final State Water Project Delivery Reliability Report, 2009.

Applying the 60 percent figure to CLWA's Table A Amount of 95,200 af, results in approximately 57,100 af expected under average Future Conditions (2029) according to the 2009 DWR Delivery Reliability Report. This is compared to the 77 percent, or 73,300 af, included in the water supply planning in the 2005 UWMP in 2030 in an average year.

**Global Climate Change Constraints.** A topic of growing concern for water planners and managers is global climate change and the potential impacts it could have on California's future water supplies. DWR's California Water Plan Update 2005 contains the first-ever assessment of such potential impacts in a California Water Plan. Volume 1, Chapter 4 of the Water Plan, *Preparing for an Uncertain Future*, lists the potential impacts of global climate change, based on more than a decade of scientific studies on the subject. In addition, please refer to this EIR, **Section 3.4, Global Warming and Climate Change**, which contains the best available information on the subject of global climate change and its effects on California's water supplies.

Reduction of snowpack patterns (the source of the SWP's water supply in Lake Oroville), changes in hydrologic patterns, sea level, rainfall intensity and statewide water demands are all possible should global climate change prove to be increasing through time. Computer models (such as CALVIN) have been developed to show water planners what types of effect climate change could have on the water supply. DWR has committed to continue to update and refine these models based on ongoing scientific

data collection, and to incorporate this information into future California Water Plans, so that agencies like CLWA and the purveyors can plan accordingly.

The 2009 DWR Delivery Reliability Report (August 2010) also addressed global climate change and its effects on the state's water resources, particularly the SWP's ability to deliver water. For the SWP, climate change has the potential to simultaneously affect the availability of source water, the ability to convey water, and users' demands for water. These potential effects are described further in the 2009 DWR Delivery Reliability Report, pp. 17–19.

**Regulatory and Litigation Constraints.** SWP water exports for users south of the Banks and Tracy pumping plants are currently limited by a series of water quality and operational constraints, governed primarily by the State Water Resources Control Board (SWRCB) Water Right Decision 1641 (D-1641), as amended. D-1641 was adopted by the SWRCB in 1999; prior to that time, SWP water exports from the Delta were limited by the SWRCB's Water Right Decision 1485 (adopted in 1978), Order Water Right (WR) 95-6 (adopted in 1995), and Order WR 98-09 (adopted in 1998).

In addition, DWR has acknowledged constraints on the SWP system due to recent federal court litigation (*Natural Resources Defense Council v. Kempthorne*, 506 F.Supp.2d 322 (E.D. Cal. 2007) (*Wanger Decision* - Delta smelt); and *Pacific Coast Federation of Fishermen's Associations, et al. v. Gutierrez, et al.*, No. 06-CV-00245-OWW-GSA (E.D. Cal. 2008) (*Wanger Decision* - Chinook salmon/steelhead) and two Biological Opinions addressing the effects of the proposed coordinated operations of the Central Valley Project and State Water Project (CVP/SWP).

The first Biological Opinion, issued by the U.S. Fish and Wildlife Service (USFWS) on December 15, 2008, addressed the effects of the CVP/SWP operations on the threatened Delta smelt and its designated habitat (2008 BO).<sup>23</sup> The second Biological Opinion, issued by the National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS), on June 4, 2009, addressed the effects of the CVP/SWP operations on the federally listed Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, green sturgeon, and Southern Resident killer whales, and the designated critical habitats of the salmon, steelhead, and sturgeon (2009 BO).<sup>24</sup> (The current status of the federal court litigation and the two Biological Opinions is provided below.)

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<sup>23</sup> Please refer to **Appendix 3.13** of this for a copy of the 2008 BO for the Delta smelt.

<sup>24</sup> Please refer to **Appendix 3.13** of this for a copy of the 2009 BO for the Chinook salmon/sturgeon.

On November 14, 2008, the California Fish and Game Commission listed the longfin smelt as a threatened species under the California Endangered Species Act. The Commission also voted to change the state-protected status of the Delta smelt from threatened to endangered. In response, on December 9, 2008, the State Water Contractors and other water agencies filed litigation challenging the Commission's decision on the longfin smelt under the California Endangered Species Act. The litigation is still pending, and the outcome of the litigation cannot be predicted as of this writing.

**State/Federal Court Litigation.** Recent state and federal court litigation has had an impact upon the availability and reliability of imported SWP supplies. For example, in October 2006, plaintiff, Watershed Enforcers, a project of the California Sportfishing Protection Alliance, filed a lawsuit in Alameda County Superior Court alleging that DWR was not in compliance with the California Endangered Species Act (CESA) and did not have the required state incidental take permit to protect the Delta smelt as part of DWR's pumping operations at the Harvey O. Banks Pumping Plant located near the town of Tracy (*Watershed Enforcers, et al. v. California Department of Water Resources, et al.* Alameda County Superior Court No. RG06292124 [*Watershed* decision]). In April 2007, the court agreed with the plaintiff and ordered a shutdown of pumping from the Delta if appropriate permits could not be obtained in 60 days. In May 2007, DWR filed an appeal of the trial court's decision, which automatically stayed the decision pending the outcome of the appeal. At the same time, DWR entered into a Memorandum of Understanding with California Department of Fish and Game (CDFG) to jointly work with the appropriate federal agencies to develop a federal Biological Opinion that complies with CESA. During preparation of the new Biological Opinion, DWR committed itself to actions related to protecting the Delta smelt and other species through adaptive management provisions. Upon completion of this effort, DWR plans to submit a request to CDFG for a consistency determination under CESA that would allow for incidental take based on the new federal Biological Opinion.

The *Wanger* Decisions also have affected imported SWP supplies.<sup>25</sup> The background of the *Wanger* Decisions and their implications are discussed further below.

**2007 *Wanger* Decision.** On February 16, 2005, the USFWS issued its Biological Opinion, determining that the operations and criteria for both the CVP and SWP would not result in jeopardy to the Delta smelt. On May 20, 2005, the Natural Resources Defense Council (NRDC) and others filed a supplemental complaint in federal court against the Secretary of the Interior and the Director of USFWS, challenging the adequacy of the 2005 Biological Opinion. On June 9, 2006, plaintiffs filed their motion for summary judgment. On July 6, 2006, in light of new information, the U.S. Bureau of Reclamation (Bureau), operator of CVP,

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<sup>25</sup> Please refer to **Appendix 3.13** of this for a copy of the 2009 BO for the Chinook salmon/sturgeon.

requested that USFWS reinitiate consultation on the operations plan and criteria for the CVP. Notwithstanding the request for reinitiation of consultation, the parties proceeded with briefing their cross-motions for summary judgment and, on May 25, 2007, the U.S. District Court for the Eastern District, the Honorable Oliver W. Wanger, presiding, found that the 2005 Biological Opinion was inadequate and that the no-jeopardy determination was arbitrary, capricious, and contrary to the law.<sup>26</sup>

Thereafter, on August 31, 2007, Judge Wanger announced an initial ruling, which outlined an operational plan calling for reductions in water supplies to protect the Delta smelt. The Court specified that reduced operations would last until the fall of 2008, while federal agencies develop a revised Biological Opinion for Delta smelt that will ensure the SWP's and CVP's compliance with the requirements of the federal ESA.

On December 14, 2007, Judge Wanger issued a final court order, which curtailed Delta pumping to protect the Delta smelt. The range of reduced operations is consistent with earlier estimates made by DWR following the Court's initial ruling in August 2007. Following Judge Wanger's final ruling, DWR performed additional modeling and analysis of the impacts of the *Wanger* Decision on Delta pumping. According to DWR, the final ruling will primarily affect export pumping between January and June 2008, when juvenile Delta smelt are at greatest risk of entrainment in pumps. Further, DWR has stated that the actual impact on SWP water supply will depend on a number of factors, including the locations where adult smelt spawn and offspring hatch, levels of precipitation for the year, and water temperatures affecting how quickly the fish migrate. The Court's restrictions on SWP/CVP operations lasted until the fall of 2008, while the revised Biological Opinion for Delta smelt was completed.

**2008 Wanger Decision.** U.S. District Court Judge Oliver Wanger also recently invalidated a 2004 biological opinion issued by the NMFS. The 2004 NMFS Biological Opinion determined that, pursuant to section 7 of the federal Endangered Species Act (ESA), the operations of the CVP/SWP would not jeopardize the continued existence of three listed Delta fish species protected under the federal ESA, namely, the Sacramento River winter-run Chinook salmon, the Central Valley spring-run Chinook salmon, the Central Valley steelhead, and green sturgeon. Judge Wanger invalidated this biological opinion, relying on several of the factual findings made by NMFS in that opinion. Judge Wanger also faulted the biological opinion for, among other issues, failing to adequately analyze the impact of the operations plan on the critical habitat of the three species.<sup>27</sup>

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<sup>26</sup> The 2007 *Wanger* decision (*Natural Resources Defense Council v. Kempthorne*, 506 F.Supp.2d 322 (E.D. Cal. 2007)) is found in **Appendix 3.13** of this EIR.

<sup>27</sup> The 2008 *Wanger* decision (*Pacific Coast Federation of Fishermen's Associations, et al. v. Gutierrez, et al.*, No. 06-CV-00245-OWW-GSA (E.D. Cal. 2008)) is found in **Appendix 3.13** of this EIR.

After Judge Wanger's ruling, the court held hearings in June and July 2008 on possible remedies; however, no further remedies were imposed beyond the curtailments already issued with respect to the Delta smelt in the prior 2007 *Wanger* Decision.

**2008 BO.** On December 15, 2008, USFWS issued the new Biological Opinion for Delta smelt (2008 BO). The Opinion continues restrictions on the CVP/SWP operations that have been in place under Judge Wanger's order concerning Delta smelt. However, the 2008 BO also imposed new requirements for Delta outflows under certain conditions and requires increased reservoir releases in the fall of some years to reduce salinity. DWR recently (January 26, 2009) issued the 2009 DWR Delivery Reliability Report, which addresses the ramifications of the new 2008 BO, and its effects on SWP supplies and deliveries. In cooperation with USBR, NMFS, USFWS, and CDFG, DWR has developed new assumptions for implementation of both the USFWS BO (December 15, 2008) and NMFS BO (June 4, 2009) in CALSIM II. The USFWS BO and NMFS BO assumptions are included in Appendix A of the 2009 DWR Delivery Reliability Report. The DWR State Water Project Delivery Reliability Report (DWR Delivery Reliability Report) has been issued biennially since 2003. It is specifically intended to assist SWP Contractors in assessing the delivery reliability of the SWP component of their overall water supplies. In response to the 2008 BO, on March 5, 2009, the State Water Contractors filed litigation challenging the new 2008 BO for the Delta smelt under provisions of the federal Endangered Species Act. Additional litigation, brought by the Coalition for a Sustainable Delta and Kern County Water Agency, also challenged the regulatory restrictions placed on SWP operations in the 2008 BO under the federal ESA. The litigation is still pending, and the outcome of the litigation cannot be predicted as of this writing.

**2009 BO.** On June 4, 2009, NOAA/NMFS released the 2009 BO addressing the effects of the CVP/SWP operations on the salmon, steelhead, and sturgeon. Federal biologists and hydrologists concluded that current water pumping operations in the CVP/SWP should be changed to ensure survival of the fish species. According to the NMFS, the 2009 BO's restrictions on CVP/SWP operations will impact an estimated five to 7 percent of the available annual water on average moved by the federal and state pumping plants, or about 330,000 acre-feet per year (afy); however, water operations will not be affected by the 2009 BO immediately and will be tiered to water year type. The 2009 BO also includes exception procedures for drought and health and safety issues.<sup>28</sup>

DWR issued an initial response to the new 2009 BO on June 4, 2009. According to DWR, the 2009 BO "reaffirms the need for a comprehensive solution to the water and environmental conflicts in the

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<sup>28</sup> Please refer to this EIR, **Appendix 3.13**, for the NOAA/NMFS release, June 4, 2009, summarizing the 2009 BO.



Delta.”<sup>29</sup> DWR’s initial estimates show the average year impacts closer to 10 percent, which could reduce Delta export on average by about 300,000 to 500,000 acre-feet, which is in addition to current pumping restrictions imposed by the 2008 BO to protect the Delta smelt. Again, in cooperation with the US Bureau of Reclamation (USBR), NMFS, USFWS, and CDFG, DWR has developed new assumptions for implementation of both the USFWS BO (December 15, 2008) and NMFS BO (June 4, 2009) in CALSIM II. The USFWS BO and NMFS BO assumptions are included in Appendix A of the 2009 DWR Delivery Reliability Report.

After issuance of the 2009 BO, on August 6, 2009, the SWP Contractors filed a lawsuit against federal agencies challenging the 2009 BO on federal ESA grounds. According to the litigation, the BO failed to take into account the many other factors contributing to the fish population decline, and failed to consider the impacts that the 2009 BO would have on people, a requirement of the National Environmental Policy Act (NEPA).<sup>30</sup> In addition, on August 28, 2009, the Coalition for a Sustainable Delta and Kern County Water Agency jointly filed suit against federal agencies challenging the 2009 BO under the federal ESA.<sup>31</sup> This litigation is still pending and the outcome of the litigation cannot be predicted as of this writing.

**Implications of Regulatory/Litigation Constraints.** The *Watershed* decision, the two *Wanger* Decisions, and the recent actions taken by USFWS, NMFS, and California Fish and Game Commission, as well as the associated litigation, have serious implications on imported SWP/CVP water supplies throughout California. These implications are outlined below based on the best available information.

In terms of short-term water supply availability, there have been short-term effects related to issues presented in the *Watershed* and *Wanger* Decisions. For example, pumping operations were shut down for approximately nine days in June 2007 due to concerns over the declining number of Delta smelt. DWR then operated the pumps at limited levels for several weeks while waiting for the smelt to migrate to cooler waters. DWR then resumed normal operations in July 2007. There is also concern that the remedy adopted by the District Court could ultimately become part of the conditions in the new incidental take permit, which is currently subject to litigation. These concerns, if they materialize, could limit the percentage of SWP water that can be delivered to SWP Contractors, including CLWA. If such remedies are not ultimately part of the incidental take permit, the permit itself may contain conditions that would lower the percentage of SWP water made available for delivery to Southern California, including the

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<sup>29</sup> Please refer to this EIR, **Appendix 3.13**, for the DWR release, June 4, 2009, responding to the new 2009 BO.

<sup>30</sup> Please refer to this EIR, **Appendix 3.13**, for the SWP Contractors release, August 6, 2009, concerning the litigation filed challenging the 2009 BO.

<sup>31</sup> Please refer to this EIR, **Appendix 3.13**, for the Coalition for a Sustainable Delta/ Kern County Water Agency release, August 28, 2009, concerning the litigation filed challenging the 2009 BO.

Santa Clarita Valley. The 2009 DWR Delivery Reliability Report updates the information contained in the 2007 DWR Delivery Reliability Report by estimating the amounts of water deliveries for current (2009) conditions and conditions 20 years in the future (2029). These estimates incorporate restrictions of SWP and CVP operations in accordance with the BOs of the USFWS (2008) and NMFS (2009), respectively.

**Executive/Legislative Response.** Because of these concerns, Governor Schwarzenegger directed DWR to take immediate action to improve conditions in the Delta.<sup>32</sup> According to the Office of the Governor, the Governor is building on his Strategic Growth Plan from last year, which consists of approximately \$6 billion to upgrade California's water systems. The Governor's plan invests \$4.5 billion to develop additional surface and groundwater storage. The plan also includes \$1 billion toward restoration of the Delta, including development of a new conveyance system, \$250 million to support restoration projects on the Klamath, San Joaquin, and Sacramento rivers, and the Salton Sea project, and \$200 million for grants to California communities to help conserve water. Using existing resources, DWR will implement numerous actions, including screening Delta agriculture intake pumps to protect smelt, restoring the North Delta's natural habitat, improving the Central Delta water flow patterns, and improving DWR's ability to respond to Delta emergencies, such as levee failures.

The Governor also has directed the Delta Vision Blue Ribbon Task Force to develop a delta management plan. The Task Force presented its findings and recommendations in early 2008, and its strategic plan was issued at the end of 2008. The final report includes a suite of strategic recommendations for long-term, sustainable management of the Bay-Delta. Please refer to the Delta Vision website for the final report and associated information (<http://deltavision.ca.gov/> [last visited March 20, 2009]). The Bay-Delta Conservation Plan is also underway. The Plan is intended to ensure compliance with federal and state Endangered Species Act requirements in the Delta. The \$1 billion proposed in the Governor's comprehensive plan will be used to fund recommendations from both the Delta Vision Task Force and the Conservation Plan.<sup>33</sup>

Over the long-term, water supply availability and reliability will continue to be assessed by DWR in DWR's biennial State Water Project Delivery Reliability Reports. These reports take into account a myriad of factors in evaluating long-term water supply availability and reliability. These factors include multiple sources of water, a range of water demands, timing of water uses, hydrology, available facilities, regulatory restraints, including pumping constraints due to impacts on listed fish species, water

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<sup>32</sup> For the Governor's release issued July 17, 2007, please refer to <http://gov.ca.gov/index.php?/print-version/press-release/6972/>, which is included in **Appendix 3.13** of this EIR.

<sup>33</sup> Please refer to the 2009 DWR Delivery Reliability Report (December 2009) for the current status of planning activities that may affect SWP delivery reliability, pages 13-16, incorporated by reference.

conservation strategies, and future weather patterns. The *Watershed* Decision, the two *Wanger* Decisions, and the two Biological Opinions, highlight the regulatory restraints applicable to SWP supplies, which have impacted DWR deliveries of SWP supplies in the past, and could curtail such deliveries in the future.

**Recent California Legislation.** Governor Schwarzenegger and the California legislature successfully crafted a comprehensive package of bills aimed at ensuring a reliable water supply in the future, as well as restoring the Delta and other ecologically sensitive areas. This comprehensive legislation places water supply and the Delta environment on an equal footing, establishing those principles as the State of California's fundamental and co-equal goals for the Delta. In summary, the plan is comprised of four policy bills and an \$11.14 billion bond. The package establishes a Delta Stewardship Council, sets ambitious water conservation policy, ensures better groundwater monitoring, and provides funds for the State Water Resources Control Board for increased enforcement of illegal water diversions. The bond, if approved in 2012 general elections, will fund, with local cost-sharing, drought relief, water supply reliability, Delta sustainability, statewide water system operational improvements, conservation and watershed protection, groundwater protection, and water recycling and water conservation programs.<sup>34</sup>

### Summary of the Four Bills

**SB 1 – Delta Governance/Delta Plan:** SB 1 establishes the framework to achieve the co-equal goals of providing a more reliable water supply to California and restoring and enhancing the Delta ecosystem. The co-equal goals will be achieved in a manner that protects the unique cultural, recreational, natural resource, and agricultural values of the Delta. Specifically, this bill:

1. Creates the Delta Stewardship Council, consisting of seven members with diverse expertise providing a broad statewide perspective. The Chairperson of the Delta Protection Commission is a permanent member of the Council. The Council is also tasked with:
  - (a) Developing a Delta Plan to guide state and local actions in the Delta in a manner that furthers the co-equal goals of Delta restoration and water supply reliability;
  - (b) Developing performance measures for the assessment and tracking of progress and changes to the health of the Delta ecosystem, fisheries, and water supply reliability;
  - (c) Determining if a state or local agency's project in the Delta is consistent with the Delta Plan and the co-equal goals, and acting as the appellate body in the event of a claim that such a project is inconsistent with the goals; and

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<sup>34</sup> Please refer to this EIR, **Appendix 3.13**, for DWR's 2009 Comprehensive Water Package, Special Session Policy Bills and Bond Summary, November 2009.

- (d) Determining the consistency of the Bay-Delta Conservation Plan (BDCP) with the co-equal goals.
- 2. Ensures that the Department of Fish and Game and the State Water Resources Control Board identify the water supply needs of the Delta estuary for use in determining the appropriate water diversion amounts associated with BDCP.
- 3. Establishes the Sacramento-San Joaquin Delta Conservancy to implement ecosystem restoration activities within the Delta. In addition to the restoration duties the Conservancy is required to:
  - (a) Adopt a strategic plan for implementation of the Conservancy goals;
  - (b) Promote economic vitality in the Delta through increased tourism and the promotion of Delta legacy communities;
  - (c) Promote environmental education about, and the public use of, public lands in the Delta; and
  - (d) Assist in the preservation, conservation, and restoration of the region's agricultural, cultural, historic, and living resources.
- 4. Restructures the current Delta Protection Commission (DPC), reducing the membership from 23 to 15 members, and tasks DPC with the duties of:
  - (a) Adopting an economic sustainability plan for the Delta, which is to include flood protection recommendations to state and local agencies;
  - (b) Submitting the economic sustainability plan to the Delta Stewardship Council for inclusion in the Delta Plan.
- 5. Appropriates funding from Proposition 84 to fund the Two-Gates Fish Protection Demonstration Program, a project in the central Delta that will utilize operable gates for protection of sensitive species and management of water supply.

**SB 6 – Groundwater Monitoring:** SB 6 requires, for the first time in California's history, that local agencies monitor the elevation of their groundwater basins to help better manage the resource during both normal water years and drought conditions. Specifically, this bill:

- 1. Requires the DWR to establish a priority schedule for the monitoring of groundwater basins and the review of groundwater elevation reports, and to make recommendations to local entities to improve the monitoring programs.
- 2. Requires DWR to assist local monitoring entities with compliance with this statute.
- 3. Allows local entities to determine regionally how best to set up their groundwater monitoring program, crafting the program to meet their local circumstances.
- 4. Provides landowners with protections from trespass by state or local entities.

5. Provides that if the local agencies fail to implement a monitoring program and/or fail to provide the required reports, DWR may implement the groundwater monitoring program for that region.
6. Provides that failure to implement a monitoring program will result in the loss of eligibility for state grant funds by the County and the agencies responsible for performing the monitoring duties.

**SB 7 – Statewide Water Conservation:** SB 7X-7 creates a framework for future planning and actions by urban and agricultural water suppliers to reduce California’s water use. For the first time in California’s history, this bill requires the development of agricultural water management plans and requires urban water agencies to reduce statewide per capita water consumption 20 percent by 2020. Specifically, this bill:

1. Establishes multiple pathways for urban water suppliers to achieve the statewide goal of a 20 percent reduction in urban water use. Specifically, urban water suppliers may:
  - (a) Set a conservation target of 80 percent of their baseline daily per capita water use;
  - (b) Utilize performance standards for water use that are specific to indoor, landscape, and commercial, industrial and institutional uses;
  - (c) Meet the per capita water use goal for their specific hydrologic region as identified by DWR and other state agencies in the 20 percent by 2020 Water Conservation Plan; or
  - (d) Use an alternate method that is to be developed by DWR before December 31, 2010.
2. Requires urban water suppliers to set an interim urban water use target and meet that target by December 31, 2015 and meet the overall target by December 31, 2020.
3. Requires DWR to cooperatively work with the California Urban Water Conservation Council to establish a task force that shall identify best management practices to assist the commercial, industrial, and institutional sectors in meeting the water conservation goal.
4. Requires agricultural water suppliers to measure water deliveries and adopt a pricing structure for water customers based at least in part on quantity delivered, and, where technically and economically feasible, implement additional measures to improve efficiency.
5. Requires agricultural water suppliers to submit Agricultural Water Management Plans beginning December 31, 2012 and include in those plans information relating to the water efficiency measures they have undertaken and are planning to undertake.
6. Makes ineligible for state grant funding any urban or agricultural water supplier who is not in compliance with the requirements of this bill relating to water conservation and efficient water management.
7. Requires DWR to, in 2013, 2016, and 2021, report to the Legislature on agricultural efficient water management practices being undertaken and reported in agricultural water management plans.

8. Requires DWR, the State Water Resources Control Board, and other state agencies to develop a standardized water information reporting system to streamline water reporting required under the law.

**SB 8 – Water Diversion and Use/Funding:** SB 8 improves accounting of the location and amounts of water being diverted by recasting and revising exemptions from the water diversion reporting requirements under current law. Additionally, this bill appropriates existing bond funds for various activities to benefit the Delta ecosystem and secure the reliability of the state’s water supply, and to increase staffing at the State Water Resources Control Board to manage the duties of this statute. Specifically, this bill:

1. Provides a stronger accounting of water diversion and use in the Delta by removing an exemption from reporting water use by in-Delta water users.
2. Redefines the types of diversions that are exempt from the reporting requirement.
3. Assesses civil liability and monetary penalties on diverters who fail to submit the required reports, and for willful misstatements, and/or tampering with monitoring equipment.
4. Appropriates \$546 million from Propositions 1E and 84, in the following manner:
  - (a) \$250 million (Proposition 84) for integrated regional water management grants and expenditures for projects to reduce dependence on the Delta;
  - (b) \$202 million (\$32 million Proposition 84 and \$170 million Proposition 1E) for flood protection projects in the Delta to reduce the risk of levee failures that would jeopardize water conveyance;
  - (c) \$70 million (Proposition 1E) for stormwater management grants; and
  - (d) \$24 million (Proposition 84) for grants to local agencies to develop or implement Natural Community Conservation plans.
5. Appropriates \$3.75 million from the Water Rights Fund to the State Water Resources Control Board for staff positions to manage the duties in this bill relating to water diversion reporting, monitoring, and enforcement.

### **Water Bond Summary**

The Safe, Clean, and Reliable Drinking Water Supply Act of 2010 is an \$11.14 billion general obligation bond proposal that would provide funding for California’s aging water infrastructure and for projects and programs to address the ecosystem and water supply issues in California. The bond is comprised of seven categories, including drought relief, water supply reliability, Delta sustainability, statewide water system operational improvement, conservation and watershed protection, groundwater protection and water quality, and water recycling and water conservation.



**Drought Relief – \$455 million.** This funding will be available for local and regional drought relief projects that reduce the impacts of drought conditions, including the impacts of reductions to Delta diversions. Projects will include water conservation and water use efficiency projects, water recycling, groundwater cleanup and other water supply reliability projects including local surface water storage projects that provide emergency water supplies and water supply reliability in drought conditions. Funds will be available to disadvantaged communities and economically distressed areas experiencing economic impacts from the drought for drought relief projects and programs. Funds will also be available to improve wastewater treatment facilities to protect water quality or prevent contamination of surface water or groundwater resources.

**Delta Sustainability – \$2.25 billion.** This bond will provide funds for projects to assist in maintaining and restoring the Delta as an important ecosystem. These investments will help to reduce the seismic risk to water supplies derived from the Delta, protect drinking water quality, and reduce conflict between water management and environmental protection.

**Water Supply Reliability – \$1.4 billion.** These funds would be in addition to prior funding provided by Proposition 50 and Proposition 84 and would support the existing Integrated Regional Water Management (IRWM) program. IRWM is designed to encourage integrated regional strategies for management of water resources that will protect communities from drought, protect and improve water quality and improve local water security by reducing dependence on imported water. The bond would provide funds for water supply projects in 12 regions throughout the state and would also be available for local and regional conveyance projects that support regional and interregional connectivity and water management.

**Statewide Water System Operational Improvement – \$3.0 billion.** This funding would be dedicated to the development of additional water storage, which, when combined with other water management and flood system improvement investments being made, can increase reliability and offset the climate change impacts of reduced snow pack and higher flood flows. Eligible projects for this funding include surface storage projects identified in the CALFED Bay-Delta Record of Decision; groundwater storage projects and groundwater contamination prevention or remediation projects that provide water storage benefits; conjunctive use and reservoir reoperation projects; local and regional surface storage projects that improve the operation of water systems in the state and provide public benefits.

The bond provides that water suppliers who would benefit from new storage will pay their share of the total costs of the project while the public benefits of new water storage can be paid for by this general obligation bond.

**Groundwater Protection and Water Quality – \$1 billion.** To protect public health, funds will be available for projects to prevent or reduce the contamination of groundwater that serves as a source of drinking water.

Funds will also be used to finance emergency and urgent actions on behalf of disadvantaged communities and economically distressed areas to ensure that safe drinking water supplies are available to all Californians.

**Water Recycling and Water Conservation – \$1.25 billion.** Funds will be available for water recycling and advanced treatment technology projects that recycle water or that remove salts and contaminants from water sources. Funds will also be available for urban and agricultural water conservation and water use efficiency plans, projects, and programs. These funds will assist urban water users in achieving water conservation targets.

**Conservation and Watershed Protection – \$1.785 billion.** Funds will be available, through a 50-50 cost share program, for ecosystem and watershed protection and restoration projects in 21 watersheds throughout the state, including coastal protection, wildlife refuge enhancement, fuel treatment and forest restoration, fish passage improvement and obsolete dam removal.

In summary, while the bills just recently passed into law, and the bond still must be approved by voters in the November 2012 general election, the legislative package represents historic steps to reform and rebuild California's water system.<sup>35</sup> The legislative package also has brought state-wide implications, the most significant of which include establishing a Delta Stewardship Council to govern the Delta; setting aggressive water conservation policies and targets for both urban and agricultural uses of water (policies that mandate a 20 percent reduction in urban per capita water use by December 31, 2020, including incremental progress toward the 20 percent goal by reducing per capita urban water use by at least 10 percent on or before December 31, 2015); and a bond measure authorizing the funding of several water reliability, conservation, and efficiency projects. The effects of the bills and bond package cannot be quantified at this time; however, they represent state-wide solutions to several competing interests, including drought relief, water supply reliability, Delta sustainability, water conservation, and groundwater protection.

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<sup>35</sup> Please refer to this EIR, **Appendix 3.13**, for the Office of the Governor's release, November 4, 2009, regarding passage of historic comprehensive water package.

### **Draft Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem**

As described above, in November 2009, California enacted a comprehensive package of four policy bills and a bond measure intended to meet California's growing water challenges by adopting a policy of sustainable water supply management to ensure a reliable water supply for the State and to restore the Delta and other ecologically sensitive areas. One of these bills, Senate Bill No. 1 (SB 1) (Stats. 2009 (7<sup>th</sup> Ex. Sess.) ch 5, sec. 39) contains the Sacramento-San Joaquin Delta Reform Act of 2009 (Delta Reform Act), Water Code section 85000 et seq. The Delta Reform Act establishes a Delta Stewardship Council (Council), tasked with developing a comprehensive, long-term management plan for the Delta, known as the Delta Plan, and providing direction to multiple state and local agencies that take actions related to the Delta. Water Code section 85086 requires the State Water Resources Control Board (State Water Board) to use the best available scientific information gathered as part of a public process conducted as an informational proceeding to develop new flow criteria for the Delta ecosystem to protect public trust resources. The purpose of the flow criteria is to inform planning decisions for the Delta Plan and the Bay Delta Conservation Program (BDCP). In July 2010 and in accordance with the legislation, the SWRCB prepared a report entitled, *Draft Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem*. A summary of this report is provided below.

The Sacramento-San Joaquin Delta (Delta) is a critically important natural resource for California and the nation. It is both the hub of California's water supply system and the most valuable estuary and wetlands on the western coast of the Americas. The Delta is in ecological crisis, resulting in high levels of conflict that affect the sustainability of existing water policy in California. Several species of fish have been listed as protected species under the California Endangered Species Act (CESA) and under the federal Endangered Species Act (ESA). These two laws and other regulatory constraints have restricted water diversions from the Delta in an effort to prevent further harm to the protected species.

The State Water Board held an informational proceeding on March 22, 23, and 24, 2010, to receive scientific information from technical experts on the Delta outflows needed to protect public trust resources. The State Water Board also received information at the proceeding on flow criteria for inflow to the Delta from the Sacramento and San Joaquin rivers and Delta hydrodynamics. The State Water Board did not solicit information on the need for water for other beneficial uses, including the amount of water needed for human health and safety, during the informational proceeding. Nor did the State Water Board consider other policy considerations, such as the state goal of providing a decent home and suitable living environment for every Californian. During this process, participants cautioned the State Water Board on the limitations of any flow criteria (Fleenor et al., 2010).

**State Water Board Approach:** In determining the extent of protection to be afforded public trust resources through the development of the flow criteria, the State Water Board considered the broad goals of the planning efforts the criteria are intended to inform, including restoring and promoting viable, self-sustaining populations of aquatic species. Given the accelerated time frame in which to develop the criteria, the State Water Board's approach to developing criteria was limited to review of in stream needs in the Delta ecosystem, specifically fish species and Delta outflows, while also receiving information on hydrodynamics and major tributary inflows. The State Water Board's flow criteria determinations are accordingly limited to protection of aquatic resources in the Delta.

**Limitations of State Water Board Approach:** When setting flow objectives with regulatory effect, the State Water Board reviews and considers all the effects of the flow objectives through a broad inquiry into all public trust and public interest concerns. For example, the State Water Board would consider other public trust resources potentially affected by Delta outflow requirements and impose measures for the protection of those resources, such as requiring sufficient water for cold water pool in reservoirs to maintain temperatures in Delta tributaries. The State Water Board would also consider a broad range of public interest matters, including economics, power production, human health and welfare requirements, and the effects of flow measures on non-aquatic resources (such as habitat for terrestrial species). The limited process adopted for this proceeding does not include this comprehensive review.

The State Water Board's Public Trust Responsibilities in this Proceeding: Under the public trust doctrine, the State Water Board must take the public trust into account in the planning and allocation of water resources, and to protect public trust uses whenever feasible. (National Audubon Society v. Superior Court (1983) 33 Cal.3d 419, 446.) Public trust values include navigation, commerce, fisheries, recreation, scenic, and ecological values. "[I]n determining whether it is 'feasible' to protect public trust values like fish and wildlife in a particular instance, the [State Water] Board must determine whether protection of those values, or what level of protection, is 'consistent with the public interest.'" (State Water Resources Control Bd. Cases (2006) 136 Cal.App.4th 674, 778.) The State Water Board does not make any determination regarding the feasibility of the public trust recommendations and consistency with the public interest in this report.

In this forum, the State Water Board has not considered the allocation of water resources, the application of the public trust to a particular water diversion or use, water supply impacts, or any balancing between potentially competing public trust resources (such as potential adverse effects of increased Delta outflow on the maintenance of coldwater resources for salmonids in upstream areas). Any such application of the State Water Board's public trust responsibilities, including any balancing of public trust values and water rights, would be conducted through an adjudicative or regulatory proceeding. Instead, the State Water

Board's focus here is solely on identifying public trust resources in the Delta ecosystem and determining the flow criteria, as directed by Water Code section 85086.

**Future Use of This Report:** None of the determinations in this report have regulatory or adjudicatory effect. Any process with regulatory or adjudicative effect must take place through the State Water Board's water quality control planning, water rights processes, or public trust proceedings in conformance with applicable law. In the State Water Board's development of Delta flow objectives with regulatory effect, it must ensure the reasonable protection of beneficial uses, which may entail balancing of competing beneficial uses of water, including municipal and industrial uses, agricultural uses, and other environmental uses. The State Water Board's evaluation will include an analysis of the effect of any changed flow objectives on the environment in the watersheds in which Delta flows originate, the Delta, and the areas in which Delta water is used. It will also include an analysis of the economic impacts that result from changed flow objectives. Nothing in either the Delta Reform Act or in this report amends or otherwise affects the water rights of any person. In carrying out its water right responsibilities, the State Water Board may impose any conditions that in its judgment will best develop, conserve, and utilize in the public interest the water to be appropriated. In making this determination, the State Water Board considers the relative benefit to be derived from all beneficial uses of the water concerned and balances competing interests.

If the DWR and/or the USBR in the future request the State Water Board to amend the water right permits for the State Water Project (SWP) and/or the Central Valley Project (CVP) to move the authorized points of diversion for the projects from the southern Delta to the Sacramento River, Water Code section 85086 directs the State Water Board to include in any order approving a change in the point of the diversion of the projects appropriate Delta flow criteria. At that time, the State Water Board will determine appropriate permit terms and conditions. That decision will be informed by the analysis in this report, but will also take many other factors into consideration, including any newly developed scientific information, habitat conditions at the time, and other policies of the State, including the relative benefit to be derived from all beneficial uses of water. The flow recommendations in this report are not pre-decisional in regard to any State Water Board action. (e.g., Wat. Code, sec. 85086, subd. (c)(1).) The water supply costs of the flows identified in this report illustrate to the State Water Board the need for an integrated approach to management of the Delta. Best available science supports that it is important to directly address the negative effects of other stressors, including habitat, water quality, and invasive species, that contribute to higher demands for water to protect public trust resources. The flow criteria highlight the continued need for the BDCP to develop an integrated set of solutions and to implement non flow measures to protect public trust resources.

**Summary Determinations:** This report contains the State Water Board’s determinations as to the flows that protect public trust resources in the Delta, under the narrow circumstances analyzed in this report.

As required, the report includes the volume, timing, and quality of flow for protection of public trust resources under different hydrologic conditions. The flow criteria represent a technical assessment only of flow and operational requirements that provide fishery protection under existing conditions. The flow criteria contained in this report do not represent flows that might be protective under other conditions. The State Water Board recognizes that changes in existing conditions may alter the need for flow. Changes in existing conditions that may affect flow needs include, but are not limited to, reduced reverse flows in Delta channels, increased tidal habitat, improved water quality, reduced competition from invasive species, changes in the point of diversion of the State Water Project (SWP) and Central Valley Project (CVP), and climate change.

**Flow Criteria and Conclusions:** The numeric criteria determinations in this report must be considered in the following context:

- The flow criteria in this report do not consider any balancing of public trust resource protection with public interest needs for water.
- The State Water Board does not intend that the criteria should supersede requirements for health and safety such as the need to manage water for flood control.
- There is sufficient scientific information to support the need for increased flows to protect public trust resources; there is uncertainty regarding specific numeric criteria.

The State Water Board has considered the testimony presented during the Board’s informational proceeding to develop flow criteria and to support the following summary conclusions. Several of these summary conclusions rely in whole or in part on conclusions and recommendations made to the State Water Board by the Delta Environmental Flows Group<sup>36</sup> and the University of California at Davis Delta Solutions Group<sup>37</sup>.

1. The effects of non-flow changes in the Delta ecosystem, such as nutrient composition, channelization, habitat, invasive species, and water quality, need to be addressed and integrated with flow measures.

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<sup>36</sup> The Delta Environmental Flows Group of experts consists of William Bennett, Jon Burau, Cliff Dahm, Chris Enright, Fred Feyrer, William Fleenor, Bruce Herbold, Wim Kimmerer, Jay Lund, Peter Moyle, and Matthew Nobriga.

<sup>37</sup> The Delta Solutions Group consists of William Bennett, William Fleenor, Jay Lund, and Peter Moyle.



2. Recent Delta flows are insufficient to support native Delta fishes for today's habitats.<sup>38</sup> Flow modification is one of the immediate actions available although the links between flows and fish response are often indirect and are not fully resolved. Flow and physical habitat interact in many ways, but they are not interchangeable.
3. In order to preserve the attributes of a natural variable system to which native fish species are adapted, many of the criteria developed by the State Water Board are crafted as percentages of natural or unimpaired flows. These criteria include:
  - 75% of unimpaired Delta outflow from January through June;
  - 75% of unimpaired Sacramento River inflow from November through June; and
  - 60% of unimpaired San Joaquin River inflow from February through June.

It is not the State Water Board's intent that these criteria be interpreted as precise flow requirements for fish under current conditions, but rather they reflect the general timing and magnitude of flows under the narrow circumstances analyzed in this report. In comparison, historic flows over the last 18 to 22 years have been:

- approximately 30% in drier years to almost 100% of unimpaired flows in wetter years for Delta outflows;
  - about 50% on average from April through June for Sacramento River inflows; and
  - approximately 20% in drier years to almost 50% in wetter years for San Joaquin River inflows.
4. Other criteria include: increased fall Delta outflow in wet and above normal years; fall pulse flows on the Sacramento and San Joaquin Rivers; and flow criteria in the Delta to help protect fish from mortality in the central and southern Delta resulting from operations of the State and federal water export facilities.
  5. The report also includes determinations regarding: variability and the natural hydrograph, floodplain activation and other habitat improvements, water quality and contaminants, cold water pool management, and adaptive management:
    - Criteria should reflect the frequency, duration, timing, and rate of change of flows, and not just volumes or magnitudes. Accordingly, whenever possible, the criteria specified above are expressed as a percentage of the unimpaired hydrograph.

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<sup>38</sup> This statement should not be construed as a critique of the basis for existing regulatory requirements included in the 2006 Bay-Delta Plan and biological opinions. Those requirements were developed pursuant to specific statutory requirements and considerations that differ from this proceeding. Particularly when developing water quality objectives, the State Water Board must consider many different factors including what constitutes reasonable protection of the beneficial use and economic considerations. In addition, the biological opinions for the SWP and CVP Operations Criteria and Plan were developed to prevent jeopardy to specific fish species listed pursuant to the federal Endangered Species Act; in contrast, the flow criteria developed in this proceeding are intended to halt population decline and increase populations of certain species.

- Inflows should generally be provided from tributaries to the Delta watershed in proportion to their contribution to unimpaired flow unless otherwise indicated.
  - Studies and demonstration projects for, and implementation of, floodplain restoration, improved connectivity and passage, and other habitat improvements should proceed to provide additional protection of public trust uses and potentially allow for the reduction of flows otherwise needed to protect public trust resources in the Delta.
  - The Central Valley and San Francisco Regional Water Quality Control Boards should continue developing Total Maximum Daily Loads (TMDLs) for all listed pollutants and adopting programs to implement control actions.
  - The Central Valley Regional Water Quality Control Board should require additional studies and incorporate discharge limits and other controls into permits, as appropriate, for the control of nutrients and ammonia.
  - Temperature and water supply modeling and analyses should be conducted to identify conflicting requirements to achieve both flow and cold water temperature goals.
  - A strong science program and a flexible management regime are critical to improving flow criteria. The State Water Board should work with the Council, the Delta Science Program, BDCP, the Interagency Ecological Program, and others to develop the framework for adaptive management that could be relied upon for the management and regulation of Delta flows.
  - The numeric criteria recommended in this report are all recommendations that are only appropriate for the current physical system and climate; as other factors change the flow needs advanced in this report will also change. As physical changes occur to the environment and our understanding of species needs improves, the long-term flow needs will also change. Actual flows should be informed by adaptive management.
  - Only the underlying principles for the numeric criteria and other measures are advanced as long term recommendations.
6. Past changes in the Delta may influence migratory cues for some fishes. These cues are further scrambled by a reverse salinity gradient in the south Delta. It is important to establish seaward gradients and create more slough networks with natural channel geometry. Achieving a variable more complex estuary requires establishing seasonal gradients in salinity and other water quality variables and diverse habitats throughout the estuary. These goals in turn encourage policies which establish internal Delta flows that create a tidally mixed upstream- downstream gradient (without cross-Delta flows) in water quality. Continued through-Delta conveyance is likely to continue the need for in- Delta flow requirements and restrictions to protect fish within the Delta.
7. Restoring environmental variability in the Delta is fundamentally inconsistent with continuing to move large volumes of water through the Delta for export. The drinking and agricultural water quality requirements of through-Delta exports, and perhaps even some current in-Delta uses, are at odds with the water quality and variability needs of desirable Delta species.

8. The Delta ecosystem is likely to dramatically shift within 50 years due to large scale levee collapse. Overall, these changes are likely to promote a more variable, heterogeneous estuary. This changed environment is likely to be better for desirable estuarine species; at least it is unlikely to be worse.
9. Positive changes in the Delta ecosystem resulting from improved flow or flow patterns will benefit humans as well as fish and wildlife. Ecosystems are complex; there are many factors that affect the quality of the habitat that they provide. These factors combine in ways that can amplify the effect of the factors on aquatic resources. The habitat value of the Delta ecosystem for favorable species can be improved by habitat restoration, contaminant and nutrient reduction, changes in diversions, control of invasive species, and island flooding. Each of these non-flow factors has the potential to interact with flow to affect available aquatic habitat in Delta channels.

The State Water Board supports the most efficient use of water that can reasonably be made. The flow improvements that the State Water Board identifies in this report as being necessary to protect public trust resources illustrate the importance of addressing the negative effects of these other stressors that contribute to higher than necessary demands for water to provide resource protection. Future habitat improvements or changes in nutrients and contaminants, for example, may change the response of fishes to flow. Addressing other stressors directly will be necessary to assure protection of public trust resources and could change the demands for water to provide resource protection in the future. Uncertainty regarding the effects of habitat improvement and other stressors on flow demands for resource protection highlights the need for continued study and adaptive management to respond to changing conditions. The flow criteria identified in this report highlight the need for the BDCP to develop an integrated set of solutions, to address ecosystem flow needs, including flow and non-flow measures. Although flow modification is an action that can be implemented in a relatively short time in order to improve the survival of desirable species and protect public trust resources, public trust resource protection cannot be achieved solely through flows – habitat restoration also is needed. One cannot substitute for the other; both flow improvements and habitat restoration are essential to protecting public trust resources.

### **CLWA Imported Water Supplies and Facilities**

CLWA receives SWP and non-SWP imported water through the terminus of the West Branch of the California Aqueduct at Castaic Lake. Water supplies (whether derived from local or imported water supplies) require treatment (filtration and disinfection) prior to distribution. CLWA operates two water treatment plants, the Earl Schmidt Filtration Plant located near Castaic Lake and the Rio Vista Water Treatment Plant located in Saugus. CLWA produces water that meets drinking water standards set by the U.S. EPA and DPH. SWP water has different aesthetic characteristics than groundwater with lower dissolved mineral concentrations (total dissolved solids) of approximately 250 to 360 mg/l, and lower hardness (as calcium carbonate) of about 105 to 135 mg/l.

Historically, the State Water Project (SWP) delivered only surface water from the Sacramento/San Joaquin River Delta. However, CLWA and other SWP users, in anticipation of drought, many years ago began “water banking” programs where SWP water could be stored or exchanged during wet years and withdrawn in dry years. The last three years have seen statewide drought. As a result, water has been withdrawn from the water banking programs and pumped into the SWP system. During the period of 2008 through 2010, a greater portion of water in the SWP has been this “pumped-in” water. The “pumped-in” water has met all water quality standards established by DWR under its anti-degradation policy for the SWP.

The Rio Vista Plant is currently undergoing expansion from its current 30 million gallons per day (mgd) treatment capacity to 60 mgd, and eventually to 90 mgd as demands for treated water increase. Earl Schmidt Plant operates at a treatment capacity of 56 mgd. The current combined capacity of the two treatment plants is approximately 86 mgd.

### **Planning Area Water Supplies Within the CLWA Service Area**

The current water supply for the portion of the Planning Area within the CLWA service area boundary is derived from both local and imported sources. The principal components of this supply are imported water from the SWP, water purchased in Kern County, and local groundwater from both the Alluvial aquifer and the Saugus Formation (i.e., within the East Subbasin). Since 2003, these water supplies have been augmented by the initiation of deliveries from CLWA’s recycled water program.

In addition to these supplies, which are available and used to meet service area demands every year, CLWA also has storage programs that are planned for use under shortage situations (e.g., during drier years when imported supplies are limited). These storage programs improve the reliability of CLWA’s overall supplies by enabling existing supplies that are not needed in wetter years to be stored for use in drier years, but they do not increase the supplies available to meet service area demand every year.

Diversity of supply allows CLWA and the local retail purveyors the option of drawing on multiple sources of supply in response to changing conditions, such as varying weather patterns (average/normal years, single-dry years, multiple dry years), fluctuations in delivery amounts of SWP water, natural disasters, perchlorate-impacted wells, and other factors. In the impact analysis that follows this subsection of the water supply analysis, tables are provided below that address available water supplies compared with projected water demand within the Planning Area in normal/average years, single-dry years, and multiple-dry years over a 40-year planning horizon (see the subsection below entitled, **Water Supply and Demand**).

As shown on each table, SWP supply estimates are based on the data presented in the 2009 DWR Delivery Reliability Report, with SWP water supplies allocated among SWP Contractors in accordance with their water supply contract provisions currently in effect.<sup>39</sup>

### **Additional Annual Imported Water Supplies**

According to CLWA, as shown on **Tables 3.13-12** through **3.13-15**, the following existing additional annual water supplies are available to meet demands when necessary.

#### ***Buena Vista/Rosedale-Rio Bravo Water Acquisition Project***

CLWA has finalized a Water Acquisition Agreement with the Buena Vista and the Rosedale-Rio Bravo districts in Kern County. Under this program, Buena Vista's high flow Kern River entitlements (and other acquired waters that may become available) are captured and recharged within Rosedale-Rio Bravo's service area on an ongoing basis. CLWA will receive 11,000 af per year of these supplies annually either through direct delivery of water to the California Aqueduct via the Cross Valley Canal or by exchange of Buena Vista's and Rosedale-Rio Bravo's SWP supplies.<sup>40</sup>

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<sup>39</sup> The water supply contracts between DWR and the SWP Contractors include provisions regarding how total available SWP water supplies are allocated among SWP Contractors. The allocation provisions currently in effect are as they were amended by the Monterey Amendments. The Monterey Amendments have been in effect for more than ten years, but pursuant to litigation, is undergoing a second environmental review by DWR. In October 2007, DWR released the new Draft EIR analyzing the Monterey Amendments to the SWP contracts, including Kern water bank transfers and associated actions as part of the Monterey Settlement Agreement (SCH No. 2003011118). This Draft EIR, also known as the Monterey Plus Draft EIR, addressed the significant environmental impacts of changes to the SWP operations that are a consequence of the Monterey Amendments and the Monterey Settlement Agreement. It also discussed the project alternatives, growth inducement, water supply reliability, as well as potential areas of controversy and concern. In addition, DWR recently completed and certified the Monterey Plus Final EIR. The Draft and Final EIRs are available for public inspection and review by contacting DWR in Sacramento or from DWR's website, [http://www.des.water.ca.gov/mitigation\\_restoration\\_branch/rpmi\\_section/projects/EIR\\_index.cfm](http://www.des.water.ca.gov/mitigation_restoration_branch/rpmi_section/projects/EIR_index.cfm). The Monterey Plus Draft and Final EIRs are incorporated by reference in this EIR.

<sup>40</sup> In November 2006, a petition for writ of mandate was filed by California Water Impact Network, seeking to set aside CLWA's certification of the EIR for the Water Acquisition Agreement Project with Buena Vista and Rosedale-Rio Bravo. (*California Water Impact Network, et al. v. Castaic Lake Water Agency, et al.*, Los Angeles County Superior Court No. BS106546.) The petition was later amended to add Friends of the Santa Clara River (Friends) as a petitioner. In November 2007, the trial court filed its Statement of Decision finding that in certifying the EIR and approving the project, CLWA proceeded in a manner required by law, and that its actions were supported by substantial evidence. Judgment was entered in favor of CLWA in December 2007. Petitioners filed a notice of appeal on January 31, 2008.

On April 20, 2009, the appellate court ruled in CLWA's favor and this water purchase is now considered final and it remains appropriate to list the 11,000 afy as one of CLWA's permanent water supply sources. (Please refer to this EIR, **Appendix 3.13**, for the recent appellate court decision in *California Water Impact Network, Inc. v. Castaic Lake Water Agency*, Second Appellate District, Division Five, Appellate Case No. B205622.)

### *Nickel Water*

The Newhall Ranch Revised Additional Analysis (Volume VIII, May 2003) provides that the Specific Plan applicant has secured 1,607 af of water under contract with Nickel Family LLC in Kern County. This water is 100 percent reliable on a year-to-year basis and not subject to the annual fluctuations that can occur to the SWP in dry-year conditions. The Nickel water is part of a 10,000 acre-foot quantity of annual water supply that Nickel obtained from Kern County Water Agency (KCWA) in 2001 pursuant to an agreement between Nickel, KCWA, and Olcese Water District (Olcese). Under that agreement, Nickel has the right to sell the 10,000 AFY to third parties both within or outside Kern County. The water would be delivered through the KCWA and the SWP system. A point of delivery agreement between the CLWA and DWR would be required to transmit the water between the KCWA and CLWA service areas. This additional supply was added by CLWA to the updated water supply/demand tables to reflect current information (see **Tables 3.13-12 through 3.13-15**).

### **Additional Imported Water Supplies from Banking Programs**

According to CLWA, as shown on **Tables 3.13-11, 3.13-13, and 3.13-14**, the following existing additional water supplies are available from banking programs to meet demands when necessary.

### *Flexible Storage Accounts*

One of CLWA's Flexible Storage Accounts described in its 2005 UWMP permits it to store up to 4,684 af in Castaic Lake. Any of this amount that CLWA withdraws must be replaced by CLWA within five years of its withdrawal. CLWA manages this storage by keeping the account full in normal and wet years and then delivering that stored amount (or portions of it) during dry periods. The account is refilled during the next year that adequate SWP supplies are available to CLWA to do so. CLWA also has recently negotiated with Ventura County water agencies to obtain the use of its Flexible Storage Account. This will allow CLWA access to another 1,376 af of storage in Castaic Lake. CLWA's access to this additional storage is available on a year-to-year basis for 10 years, beginning in 2006.

### *Yuba County Water Agency Transfer Agreement*

Approximately 850 af of non-SWP imported water supply is available to CLWA in critically dry years as a result of DWR entering into agreements with the Yuba County Water Agency (YCWA) and the Bureau of Reclamation (Reclamation) related to settlement of water rights issues on the Lower Yuba River (Yuba Accord). Additional supplies could be available to CLWA in wetter years. The quantity of water would vary depending upon hydrology and the extent of participation by other SWP contractors. For purposes of analysis, however, and based on CLWA entering into a YCWA water transfer agreement with DWR,

CLWA has projected that approximately 850 af of water would be available to CLWA under the Yuba Accord in a critically dry year.

#### ***Semitropic Water Storage District Banking***

The 2005 UWMP identifies two existing contracts with the Semitropic Water Storage District under which CLWA has stored 59,000 acre-feet of water. (2005 UWMP, p. 3-22.) In accordance with the terms of CLWA's storage agreements with Semitropic, 90 percent of the banked amount, or a total of 50,870 af, is recoverable through 2012–2013 to meet CLWA water demands when needed. CLWA's approval of one of the contracts (for the 2002 banking program) was challenged in *California Water Network v. Castaic Lake Water Agency*, Ventura Superior Court Case No. CIV 215327. The trial court entered judgment in favor of CLWA. This ruling was appealed. All issues regarding the 2002 banking program with Semitropic were conclusively resolved in favor of CLWA in June 2006. In 2009 and 2010, CLWA withdrew a total of 4,950 af from its Semitropic programs.

#### ***Rosedale-Rio Bravo Water Banking***

The 2005 UWMP identifies one existing contract with the Rosedale-Rio Bravo Water Storage District under which CLWA has 64,898 af of recoverable water as of December 31, 2007. (2005 UWMP, p. 3-23.) This banking program currently offers storage and pump-back capacity of 20,000 af, with up to 100,000 af of storage capacity. This stored water will be called upon to meet demands when required and is recoverable through 2035.

#### ***Newhall Land - Semitropic Water Storage District Banking***

The Newhall Land and Farming Company has entered into an agreement to reserve and purchase water storage capacity of up to 55,000 af in the Semitropic Water Storage District Groundwater Banking Project (Newhall Ranch Revised Additional Analysis [Volume VIII, May 2003]). Sources of water that could be stored include, but are not limited to, the Nickel Water. The stored water could be extracted in dry years in amounts up to 4,950 af. There is 18,828 af of water stored in the Semitropic Groundwater Storage Bank by the Specific Plan applicant for the Specific Plan. Newhall Ranch is located within the CLWA service area. Delivery of stored water from the Newhall Semitropic Groundwater Bank requires further agreements between CLWA and the Specific Plan applicant. However, the Nickel water would only be needed on the Specific Plan site in years when all of the Newhall agricultural water has been used, which is estimated to occur after the 21<sup>st</sup> year of project construction. As a result, there is more than ample time for CLWA and the applicant to arrive at the necessary delivery arrangements and related agreements.



The 2005 UWMP also discusses water banking storage and pumpback capacity both north and south of CLWA's service area, the latter of which would provide an emergency supply in case of catastrophic outage along the California Aqueduct. With short-term storage now in place in the Semitropic banking program and long-term storage now existing with Rosedale-Rio Bravo, CLWA is assessing southern water banking opportunities. Such banking programs enhance the reliability of both existing and planned future water supplies in the Santa Clarita Valley. As shown on **Table 3.13-13**, CLWA's additional planned banking supplies are anticipated to be 20,000 acre-feet by 2015.

### **CLWA Recycled Water**

Since 2003, existing local supplies have been augmented by the initiation of recycled water deliveries from CLWA's recycled water program. CLWA currently has a contract with the Los Angeles County Sanitation District for 1,700 afy of recycled water. This supply is available in an average/normal year, a single-dry year, and in each year of a multiple-dry year period. In 2009, recycled water deliveries were 328 af, generally consistent with recycled water deliveries that have ranged between 311 and 470 afy over the past six years. In addition, in the 2005 UWMP, CLWA projects an increase of 15,700 afy in recycled water by 2030. Similar to the existing recycle water supply, the 15,700 afy of planned recycled water supply is to be available in an average/normal year, a single-dry year, and in each year of a multiple-dry year period. There is also a new phase of the of the recycled water system in design that would extend the existing system southward from the intersection of Magic Mountain Parkway and the Old Road to the intersection of Orchard Village Road and Lyons Avenue, serving large irrigation customers along its proposed alignment. Collectively, these phases will have design capacity to increase recycled water deliveries by about 1,500 afy. An additional phase, Phase 2A, extends the recycled water system from the Saugus WRP to the existing abandoned Honby Pump Station. Phase 2A will provide approximately 511 afy of recycled water, or 0.46 mgd, from the Saugus WRP. The 511 afy, or 0.46 mgd, of recycled water would divert about 9 percent of the average effluent discharged from the Saugus WRP.

As the Newhall Ranch Specific Plan is developed, recycled water also will be available to the Specific Plan from the Newhall Ranch WRP. Water from the Newhall Ranch WRP would be used to meet the non-potable demands of the Specific Plan. Areas that would use recycled water include common areas, slopes, landscaped areas, and parks.

### **Litigation Effects on Availability of Imported Water**

For the past few years, there have been a series of litigation challenges concerning imported water supplies in the Santa Clarita Valley. The litigation challenges have given rise to claims that there is

uncertainty regarding the availability and reliability of imported SWP water supplies in the Santa Clarita Valley.

The purpose of this section is to disclose these litigation challenges and their effects on the availability and reliability of imported water supplies in the Santa Clarita Valley. In summary, as discussed below, it has been determined, based on substantial evidence in the record, that the litigation challenges are not likely to affect the short-term or long-term availability or reliability of imported water supplies as projected in the 2005 UWMP and other reports, studies, and documents cited in this EIR.

#### *Litigation Concerning CEQA Review of the Monterey Agreement*

In *Planning and Conservation League v. Department of Water Resources* (2003) 83 Cal.App.4<sup>th</sup> 892, the Court of Appeal, Third Appellate District, decertified an EIR prepared by the Central Coast Water Agency (CCWA) to address the “Monterey Agreement.” The Monterey Agreement was a statement of principles to be incorporated into an omnibus amendment of the long-term contracts between the DWR and water contractors governing the supply of water under the SWP. The Monterey Agreement was the culmination of negotiations between DWR and most of the 29 SWP Contractors to settle disputes arising out of the allocation of water during times of shortage. Of the 29 SWP Contractors, 27 executed the Monterey Amendments to their water supply contracts in 1996. The Monterey Agreement contemplated revisions in the methodology of allocating water among contractors and provided a mechanism for the permanent transfer of Table A water amounts from one contractor to another. The Monterey Agreement was implemented by the execution of legally binding contracts with DWR (Monterey Amendments).

As stated above, although the court set aside the Monterey EIR prepared by CCWA, it did not set aside, invalidate, or otherwise vacate the Monterey Agreement or the Monterey Amendments. No court has ordered any stay or suspension of the Monterey Agreement pending certification of a new EIR. DWR and the SWP Contractors continue to abide by the Monterey Agreements, as implemented by the Amendments, as the operating framework for the SWP, while the new EIR is undertaken.

Following decertification of the original Monterey EIR, the PCL litigants entered into the Monterey Settlement Agreement in 2003, designating DWR as the lead agency for preparation of the new EIR to address the Monterey Agreement (entitled the “Monterey Plus EIR”). In October 2007, DWR completed the Draft EIR analyzing the Monterey Amendments to the SWP contracts, including Kern water bank transfers and associated actions as part of the Monterey Settlement Agreement (Monterey Plus Draft EIR; SCH No. 2003011118). The Draft EIR addresses the significant environmental impacts of changes to the SWP operations that are a consequence of the Monterey Amendments and the Monterey Settlement Agreement. It also discusses the project alternatives, growth inducement, water supply reliability, as well

as potential areas of controversy and concern. DWR certified the Monterey Plus Final EIR on February 1, 2010.

The Monterey Settlement Agreement also facilitated certain water transfers between contracting agencies, including CLWA's 41,000 af water transfer agreement (discussed further below). The 41,000 af transfer has been recognized as a permanent transfer by DWR, but it was subject to then pending litigation in Los Angeles Superior Court challenging the EIR prepared for that transfer. (*Friends of the Santa Clarita River v. Castaic Lake Water Agency*, see discussion below.) DWR's new Draft EIR analyzed the potential environmental effects relating to the Monterey transfers, including a focused analysis of the 41,000 af transfer, which is provided as part of a broader analysis of permanent transfers of Table A Amounts.

#### ***Litigation Concerning CEQA Review of the 41,000 af Transfer***

Over the past several years, opposition groups have claimed that a part of CLWA's SWP supplies, specifically, a 41,000 af transfer, should not be included or relied upon because it is not final and is the subject of litigation. It was asserted that litigation challenges to the 41,000 af transfer create uncertainty regarding the availability and reliability of such water for the Santa Clarita Valley. Other comments have claimed that DWR's preparation of a new Monterey Agreement EIR also introduced an element of potential uncertainty regarding the availability and reliability of the 41,000 af transfer. These comments have included claims that the subsequent Monterey Settlement Agreement precluded CLWA from using or relying upon the 41,000 af transfer until DWR has completed and certified the new Monterey Agreement EIR. As explained below, a recent published appellate court decision has resolved these claims in favor of the availability, reliability, and use of CLWA's 41,000 af transfer.

In *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2007) 157 Cal.App.4th 149 (*SCOPE II*), the Second District Court of Appeal, Division Six, affirmed the trial court's decision upholding the validity of the EIR's water supply analysis for the West Creek development project in the Santa Clarita Valley, including the EIR's assessment and reliance upon the permanent and final 41,000 af water transfer. In applying the four principles for a CEQA analysis of future water supplies articulated by the California Supreme Court in *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412 to the 41,000 af transfer, the Court of Appeal concluded that the transfer is permanent and final, and that with or without the Monterey Agreement and Monterey Amendments, the transfer is valid, permanent, and final, and could be relied upon in the project EIR as part of the water supplies in the Santa Clarita Valley.

In addition, to the *SCOPE II* litigation referenced above, the litigation dispute over the adequacy of CLWA's EIR with respect to the 41,000 af water transfer has been fully resolved in favor of CLWA.

(*Planning and Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, rehearing denied on January 14, 2010; “*PCL v. CLWA* litigation”). The discussion presented below summarizes the *PCL v. CLWA* litigation.

***PCL v. CLWA* Litigation.** As stated above, on December 17, 2009, the Court of Appeal, Second District, issued its opinion in this litigation. This new published appellate court decision upheld CLWA’s EIR for the 41,000-afy water transfer. A summary of the new decision is provided below.

In 2004, CLWA certified the 2004 EIR at issue on appeal in the new decision. The 2004 EIR analyzed the significant environmental impacts of the 41,000-afy water transfer. The 2004 EIR acknowledged that the 41,000-afy water transfer was “contractually completed in 1999” and that “[n]o permits and other approvals would be required other than the certification of this EIR.” The 2004 EIR also described the underlying history, including the Monterey Agreement and Amendments, the decertification of Central Coast’s Monterey Agreement EIR, CLWA’s earlier EIR on the 41,000-afy water transfer, and the Monterey Settlement Agreement. As to the 41,000-afy water transfer, the 2004 EIR disclosed that it did not tier from any other EIR and that it examined the environmental impacts that would occur with or without the change in water allocation criteria implemented as part of the Monterey Amendments. In addition, the 2004 EIR examined three potential water delivery scenarios for the 41,000 afy water transfer: (a) SWP allocation with the Monterey Amendments; (b) SWP allocation without the Monterey Amendments, and with the “agriculture first” reduction provision of article 18(a) in place; and (c) SWP allocation without the Monterey Amendments, but with permanent cutbacks under article 18(b). The 2004 EIR examined the environmental effects of the transfer under all three scenarios.

As to the CLWA service area, the 2004 EIR concluded that the 41,000 afy water transfer will have some significant direct impacts (largely associated with new population growth), and proposed mitigation measures to address these impacts. The 2004 EIR also examined five alternatives to the transfer, including a “no project” alternative, under which CLWA would obtain neither the 41,000 af of water nor the contractual rights to it. The remaining alternatives addressed the impact of relying on groundwater or desalinated seawater, and of receiving less or more than 41,000 af of SWP water.

In early 2005, two petitioner groups (Planning and Conservation League and California Water Impact Network) initiated litigation under CEQA, challenging the validity of CLWA’s 2004 EIR. In the litigation, petitioners claimed primarily that (1) DWR was the proper lead agency for the 2004 EIR, and not CLWA; (2) the 2004 EIR constituted improper “piecemeal” review and should have been addressed in DWR’s Monterey Plus EIR; (3) the 2004 EIR failed to acknowledge the legal uncertainty surrounding the 41,000 afy water transfer and improperly treated the transfer as a “fait accompli;” (4) the 2004 EIR failed to

disclose the potential for DWR's future Monterey Plus EIR to reach different water supply/demand conclusions; and (5) the 2004 failed to analyze the correct "no project" alternative.

After a 2007 writ hearing, the Los Angeles County Superior Court (Judge Chalfant, presiding) generally held in favor of CLWA, rejecting each of the petitioners' claims. However, the trial court found an "analytical hole" in CLWA's 2004 EIR. The trial court reasoned that the EIR failed to explain the relevance of the three potential water delivery scenarios analyzed in the EIR, leaving the public unable to meaningfully assess the EIR's analysis of the 41,000-afy water transfer. Petitioners appealed the trial court's decision. CLWA and others also filed cross-appeals.

The Court of Appeal reviewed the trial court decision anew, and reversed the trial court decision. In doing so, the Court of Appeal determined that CLWA's 2004 EIR adequately analyzed all of the 41,000 afy water transfer's potential significant environmental effects and that the document fully complied with CEQA. The Court of Appeal also remanded the case back to the trial court with directions to vacate the trial court's decision and issue a new judgment denying the petitioners' suits in their entirety.

On appeal, Petitioners first argued that CLWA, in preparing the 2004 EIR, had usurped DWR's duties as the lead agency conducting the environmental review of the Monterey Agreement/Amendments. They contended that DWR must examine the transfer because it is part of the project under review by DWR, namely, the Monterey Agreement and the contractual regime implemented under it. The Court of Appeal rejected these contentions. In doing so, the Court found that "nothing before us suggests that the Monterey Agreement, viewed as a CEQA project, included the Kern-Castaic transfer when the original Monterey Agreement EIR was prepared and certified in 1995." The appellate court acknowledge that the Monterey Agreement, as executed in December 1994, "laid the foundation for a new contractual regime between DWR and its contractors," and "freed water provided to agricultural providers for transfer to urban suppliers;" however, the court noted that the specific contractual developments for the 41,000 afy water transfer culminated in March 1999, shortly before certification of CLWA's 1999 EIR. As a result, the appellate court concluded that the 41,000 afy water transfer "was no more than 'a gleam in a planner's eye' at the time of the Monterey Agreement," therefore, the transfer "fell outside the original Monterey Agreement EIR, and was properly considered in a separate EIR" by CLWA.

Further, the Court of Appeal found that neither decertification of the 1995 Monterey Agreement EIR, nor implementation of the transfer prior to DWR's new Monterey Plus EIR, brought the transfer within DWR's Monterey Plus EIR or required DWR to be the lead agency. Therefore, relying on *Del Mar Terrace Conservancy, Inc. v. City Council* (1992) 10 Cal.App.4<sup>th</sup> 712, the Court of Appeal concluded that:

*Here, as in Del Mar Terrace, the Kern-Castaic transfer has significant independent or local utility, in view of its benefits to Castaic's service area and relative autonomy from the Monterey*

*Agreement... [A]lthough the Monterey Agreement, in fact, facilitated the transfer, there is substantial evidence (1) that the transfer could have been implemented under the pre-Monterey Agreement contractual regime, and (2) that the parties intend to continue the transfer, regardless of the outcome of DWR's environmental review of the Monterey Agreement. Moreover, as explained below, Castaic's 2004 EIR adequately reflects the potential environmental effects of the Monterey Agreement, the approval of which is 'outside [Castaic's] powers'... as well as the controversy attached to the transfer arising from DWR's review.*

The Court of Appeal also concluded that the 2004 EIR did not constitute improper piecemealing under CEQA, because "Castaic could properly certify the 2004 EIR prior to the new Monterey Agreement EIR, provided that the 2004 EIR adequately assesses the environmental impact of the Monterey Agreement, to the extent necessary for a fully informed decision regarding the Kern-Castaic transfer." Additionally, the Court of Appeal rejected the contention that Castaic did not have sufficient expertise to prepare the 2004 EIR, determining that Castaic had the primary responsibility for "carrying out" the transfer; and, therefore, was the proper lead agency.

Further, the Court of Appeal rejected the claim that the 2004 EIR "improperly describes the transfer as final," making the project a "fait accompli." The Court of Appeal cited *Santa Clarita Organization for Planning the Environment v. County of Los Angeles* (2007) 157 Cal.App.4<sup>th</sup> 149, 152 to support its holding that CLWA's 2004 EIR discussed the contractual basis for the transfer and properly evaluated the legal uncertainty of the Monterey Amendments. Although the 2004 EIR did not "expressly state that the outcome of DWR's review is 'unlikely to unwind' the transfer, its discussion unmistakably conveys this conclusion, as it characterizes implementation of the transfer without the Monterey Amendments as the 'worst-case scenario' for the transfer." The Court of Appeal also rejected the contention that the 2004 EIR "concealed" the need for DWR's approval of the Monterey Agreement under CEQA, finding that "the transfer is a separate project from the Monterey Agreement."

Similarly, the Court of Appeal rejected the claim that the 2004 EIR failed to disclose the potential for DWR's future Monterey Plus EIR to change the transfer's underlying assumptions, including the potential impact of implementing the transfer under the pre-Monterey Agreement contractual regime. The appellate court found that the 2004 EIR properly analyzed "the three scenarios relevant to the transfer, and evaluate[d] the actual water supplies available under the scenarios." The Court of Appeal also disagreed with the claim that the 2004 EIR was required to assess the possibility that CLWA would not acquire the rights to the 41,000 acre-feet of water under the pre-Monterey Agreement contractual regime as a "no project" alternative. It found that the EIR's "no project" alternative assuming the absence of the transfer was sufficient because the Monterey Amendment is a *separate* project.

Finally, on the cross-appeal, the Court of Appeal reversed the trial court's finding that the 2004 EIR contained an "analytical hole." The Court of Appeal concluded that the 2004 EIR is not subject to the

challenge on the grounds found by the trial court because the petitioners failed to assert the issue prior to the trial court's ruling. The Court of Appeal also held that the petitioners failed to exhaust their administrative remedies by not raising the issue at the trial court level. In addition, the appellate court upheld the 2004 EIR on the merits, finding the 2004 EIR adequately explained that the delivery scenarios were related to the possible outcomes of DWR's pending Monterey Plus EIR, relying on the established CEQA doctrine that absolute perfection is not required in an EIR.

On January 26, 2010, PCL and the California Water Impact Network (CWIN) filed a petition for review with the California Supreme Court in the *PCL v. CLWA* litigation. On March 10, 2010, the California Supreme Court (En Banc) denied the petitioners' petition for review and their request to depublish the Court of Appeal decision. Litigation on the transfer to CLWA has now been fully and finally resolved in favor of CLWA.

#### ***Summary of the Conclusions About Effect of Litigation on Sufficiency of Water Supplies***

Based on the above analysis, this EIR acknowledges that multiple court challenges have been filed in the past challenging the sufficiency of water supplies. Based on the status of these challenges, and the fact that no court has yet set aside any of the water transfers or other physical activities approved under any of the challenged documents, substantial evidence exists in this EIR and record to support the conclusions in the 2005 *UWMP* and the 2009 Water Report that sufficient supplies of water exist to serve existing and planned development in the Santa Clarita Valley.

#### **Summary of Past and Current Drought Conditions**

In February 2008, Governor Arnold Schwarzenegger asked the Legislature for a plan to achieve a 20 percent reduction in per capita water use statewide by 2020, explaining that conservation is one of the key ways to provide water for Californians and to protect and improve the Delta ecosystem. In June 2008, after two consecutive years of below-average rainfall, low snowmelt runoff, and court-ordered water transfer restrictions, Governor Schwarzenegger announced a statewide drought and issued an Executive Order (S-06-08), which takes immediate action to address current drought conditions. The Executive Order directed DWR to, among other things: (1) facilitate water transfers to respond to shortages across the state due to drought conditions; (2) work with local water districts and agencies to improve local coordination; and (3) expedite existing grant programs to assist local water districts and agencies. The Executive Order also encourages local water districts and agencies to promote water conservation. Specifically, they are encouraged to work cooperatively on the regional and state level to take immediate action to reduce water consumption locally and regionally for the remainder of 2008 and prepare for potential worsening drought conditions in 2009 (While DWR has indicated that drought conditions have



not ended, the 2009/2010 water year had a higher than normal amount of precipitation and snowfall across the state).

In response to the Governor's Executive Order, DWR implemented a number of actions to address the 2008/2009 drought conditions. For example, to help facilitate the exchange of water throughout the state, DWR established a 2009 Drought Water Bank. To implement the 2009 Drought Water Bank, DWR purchased water from willing sellers, primarily from water suppliers, upstream of the Sacramento-San Joaquin Delta. This water was transferred using SWP or CVP facilities to water suppliers that are at risk of experiencing water shortages in 2009 due to drought conditions and that require supplemental water supplies to meet anticipated demands. Please refer to DWR's Web site, [http://www.water.ca.gov/drought/docs/2009drought\\_actions.pdf](http://www.water.ca.gov/drought/docs/2009drought_actions.pdf) (accessed December 8, 2008) for further information about the drought conditions and DWR's response to those conditions.

Also in response to the Governor's Executive Order, in June 2008, the Metropolitan Water District of Southern California (MWD) issued a "Water Supply Alert" in Southern California urging local agencies to aggressively pursue conservation measures. On August 5, 2008, the Los Angeles County Board of Supervisors approved a resolution declaring a County-wide "water supply and conservation alert." The Board's resolution, among other things, urged intensification of water conservation efforts to achieve a 15 to 20 percent reduction in overall demand; requested local water purveyors and cities to accelerate and intensify public outreach campaigns to communicate the need for water conservation to the general public; and urged cities to update and adopt water wasting ordinances and prepare for enforcement of the ordinances, if necessary. The actions at the state, regional, and local level are likely to result in future regulatory action to strengthen the existing framework for water conservation.

Beginning with the first Strategic Growth Plan in 2006, the Governor called for a comprehensive plan to address California's water needs. The Governor renewed that call in his 2008–09 budget by proposing an \$11.9 billion water bond for water management investments that will address population growth, climate change, water supply reliability, and environmental needs. Specifically, the bond includes:

- **Water Storage:** \$3.5 billion dedicated to the development of additional storage.
- **Delta Sustainability:** \$2.4 billion to help implement a sustainable resource management plan for the Delta.
- **Water Resources Stewardship:** \$1.1 billion to implement river restoration projects.
- **Water Conservation:** \$3.1 billion to increase water use efficiency.
- **Water Quality Improvement:** \$1.1 billion for efforts to reduce the contamination of groundwater.
- **Other Critical Water Projects:** \$700 million for water recycling, hillside restoration for areas devastated by fire and removal of fish barriers on key rivers and streams.

To address California's then third consecutive drought year, on February 27, 2009, Governor Schwarzenegger also proclaimed a state of emergency<sup>41</sup> and ordered immediate action to manage California's water supplies. In the proclamation, the Governor used his authority to direct all state government agencies to utilize their resources, implement a state emergency plan, and provide assistance for people, communities, and businesses impacted by the drought. The proclamation:

- Requests that all urban water users immediately increase their water conservation activities in an effort to reduce their individual water use by 20 percent;
- Directs DWR to expedite water transfers and related efforts by water users and suppliers;
- Directs DWR to offer technical assistance to agricultural water suppliers and agricultural water users, including information on managing water supplies to minimize economic impacts and implementing efficient water management practices;
- Directs DWR to implement short-term efforts to protect water quality or water supply, such as the installation of temporary barriers in the Delta or temporary water supply connections;
- Directs the Labor and Workforce Development Agency to assist the labor market, including job training and financial assistance;
- Directs DWR to join with other appropriate agencies to launch a statewide water conservation campaign calling for all Californians to immediately decrease their water use;
- Directs state agencies to immediately implement a water use reduction plan and take immediate water conservation actions and requests that federal and local agencies also implement water use reduction plans for facilities within their control.

In accordance with the proclamation, DWR provided an updated report on the state's drought conditions and water availability. Also according to the proclamation, if the emergency conditions have not been sufficiently mitigated, the Governor will consider additional steps. These could include the institute of mandatory water rationing and mandatory reductions in water use; reoperation of major reservoirs in the state to minimize impacts of the drought; additional regulatory relief or permit streamlining as allowed under the Emergency Services Act; and other actions necessary to prevent, remedy, or mitigate the effects of the extreme drought conditions.

DWR and California's Department of Food and Agriculture also recommended measures to reduce the economic impacts of the drought, including but not limited to water transfers, through-Delta emergency transfers, water conservation measures, efficient irrigation practices, and improvements to the California Irrigation Management Information System.

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<sup>41</sup> See State of Emergency – Water Shortage, Proclamation by the Governor of the State of California, February 27, 2009. This can be found on the governor's website at <http://gov.ca.gov/proclamation/11557/>.

Drought conditions present significant short-term challenges to the provision of water supplies locally and statewide. Nonetheless, drought conditions are part of the historic and ongoing hydrologic cycle that occurs in California and CLWA and local retail purveyors have developed various contingencies in order to minimize short-term impacts on water supplies due to drought conditions. Such actions include voluntary/mandatory conservation measures, public outreach programs promoting efficient water use and conservation, water transfers, and use of “banked” water supplies, if necessary to meet demands in drought conditions.

## Planning Area Water Demand

The projected water demands for the portions of the Planning Area within and outside of the CLWA service area boundary were provided by the Santa Clarita Valley water purveyors. Demands were prepared by assigning representative water demand factors to all OVOV land uses in the Planning Area. The Purveyors have indicated that the water demand factors used are considered reasonable for long-term planning purposes based on purveyor experience, the local climate, and the types of development in the Santa Clarita Valley. The water demand factors also do not reflect current efforts to reduce per capita water use by 20 percent by 2020 outlined in the 2009 water legislation (SB 7X-7). **Table 3.13-11, Projected CLWA Water Demands (2050)**, shows projected water demands inside the CLWA service area to the buildout year of 2050.<sup>42</sup> As shown, by 2050 annual water demand within the CLWA service area is projected to be approximately 135,450 AF (after conservation). In single and multi-year dry periods, 2050 water demand is projected to increase to approximately 149,700 AF (water demands vary from year-to-year depending on local hydrologic and meteorologic conditions, with demands generally increasing in years of below average local precipitation and decreasing in years of above average local precipitation). The water demands shown in **Table 3.13-15** represent an update of demands presented in the 2005 UWMP (shown in **Table 3.13-15** for comparison purposes). Factors contributing to the differing projections include a slowing of water demand growth as Planning Area buildout approaches, expected diminishing SWP supplies in the future and expanding conservation efforts over time consistent with SB 7X-7.

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<sup>42</sup> For the purposes of this analysis, CLWA service area demand includes the demands of private well owners with access to groundwater within the East Subbasin within the CLWA service area boundary. This demand is estimated to be approximately 500 acre-feet per year.

**Table 3.13-11**  
**Projected CLWA Water Demands (2050)**

	2010	2015	2020	Demand (af)			
				2025	2030	2035	2050
<b>OVOV Demand <sup>1</sup></b>							
All Purveyors <sup>2</sup>	70,008	79,026	88,044	97,061	106,079	115,097	142,500
Agricultural/ Private Uses	14,500	14,500	13,000	11,200	10,200	9,200	7,200
Demand w/o Conservation	84,508	93,526	101,044	108,261	116,279	124,297	149,700
Conservation of 10% <sup>3</sup>	(7,001)	(7,903)	(8,804)	(9,706)	(10,608)	(11,510)	(14,250)
Total Demand (w/10% conservation)	77,507	85,623	92,240	98,555	105,671	112,787	135,450
<b>2005 UWMP Demand <sup>4</sup></b>							
Total Demand (w/10% conservation)	91,450	99,700	106,450	116,500	125,400	--	--

*Notes:*

<sup>1</sup> Provided by the Santa Clarita Valley water purveyors, July 2010. Includes private well owners within the East Subbasin.

<sup>2</sup> Purveyors refer to CLWA SCWD, NCWD, VWC, and Los Angeles County Waterworks District No. 36.

<sup>3</sup> A 10 percent reduction on the urban portion of the normal year demand is estimated to result from conservation BMPs. Not shown is a 10 percent per capita reduction in urban demand by 2015 and a 20 percent per capita reduction now mandated by SB 7X-7.

<sup>4</sup> 2005 UWMP. 2005 UWMP demand and supply projections were estimated for buildout in 2030.

The water purveyors also provided a projection for water demand in the portion of the Planning Area outside of the CLWA service area. Applying water demand factors to land uses provided by the City and County, the purveyors estimate water demand in this area would be approximately 6,000 afy by 2050.

In 2001, CLWA signed the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU) on behalf of the CLWA service area. By signing the MOU, CLWA became a member of the California Urban Water Conservation Council (CUWCC) and pledged to implement all cost-effective Best Management Practices (BMPs) for water conservation. CLWA has estimated that conservation measures within the service area can reduce the urban demand water demand by 10 percent. The BMPs include:

- System Water Audits, Leak Detection and Repair; Public Information Programs; School Education Programs;
- Wholesale Agency Programs;

- Conservation Pricing;
- Water Conservation Coordinator;
- Water survey programs for single-family residential and multi-family residential customers;
- System water audits, leak detection and repair;
- Metering with commodity rates for all new connections and retrofit of existing connections;
- Large landscape conservation programs and incentives;
- High-efficiency clothes washing machine financial incentive programs;
- Conservation programs for commercial, industrial, and institutional (CII) accounts; and
- Water waste prohibition.

An additional 10 percent per capita urban demand reduction could also result from the recently approved SB 7X-7, which requires a 20 percent reduction in per capita urban demand by 2020. However, for the purposes of this analysis, this additional conservation is not included in the water demands presented. The amount of additional conservation expected in the Santa Clarita Valley as a result of this bill is the subject of study in the 2010 Urban Water Management Plan (2010 UWMP) presently being prepared by CLWA. The 2010 UWMP is expected to be released no later than June 2011.

## REGULATORY FRAMEWORK

### Federal

#### *Safe Drinking Water Act*

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply. The law was amended in 1986 and 1996 and requires a variety of actions to protect drinking water and its sources. SDWA authorizes the US EPA to set national health-based standards for drinking water to protect against both naturally occurring and man-made contaminants that may be found in drinking water. The US EPA, state agencies, and water purveyors work together to ensure that SDWA standards are met.

## State

### *California Drinking Water Regulations*

California's drinking water standards (Maximum Contaminant Levels [MCLs]) must be met by all public drinking water systems to which they apply. Primary MCLs are found in Title 22 California Code of Regulations Sections 64431–64444. Secondary MCLs address the taste, odor, or appearance of drinking water and are found in Title 22 California Code of Regulations Section 64449.

### *Urban Water Management Planning Act (UWMP Act)*

The UWMP Act requires most urban water suppliers to update and submit to the California Department of Water Resources (DWR) an Urban Water Management Plan (UWMP) every five years. The UWMP is required in order for a water supplier to be eligible for the DWR-administered state grants, loans, and drought assistance. The UWMP provides information on water use, water resources, recycled water, water quality, reliability planning, demand management measures, best management practices, and water shortage contingency planning for a specified service area or territory.

### *Porter-Cologne Water Quality Control Act*

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resource Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) power to protect water quality and is the primary vehicle for implementing California's responsibilities under the federal Clean Water Act. The Porter-Cologne Act grants the SWRCB and the RWQCBs authority to adopt plans and policies, to regulate discharges of waste to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

### *Porter-Cologne Water Quality Control Act – Basin Plan*

Each RWQCB must formulate and adopt a water quality control plan (Basin Plan) for its region. The Basin Plan must conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its state water policy. To implement state and federal law, the Basin Plan establishes beneficial uses for surface and groundwater in the region, and sets forth narrative and numeric water quality standards to protect those beneficial uses. The applicable Basin Plan (RWQCB, 1994, as amended)



provides quantitative and narrative criteria for a range of water quality constituents applicable to certain receiving water bodies and groundwater basins within the Los Angeles Region. Specific water quality criteria are provided for the larger, designated water bodies and groundwater basins within the region, as well as general criteria or guidelines for ocean waters, bays and estuaries, inland surface waters, and groundwaters.

## **Local**

### ***CLWA Groundwater Management Plan***

In 2001, as part of legislation authorizing CLWA to provide retail water service to individual municipal customers, Assembly Bill (AB) 134 (2001) included a requirement that CLWA prepare a groundwater management plan in accordance with the provisions of Water Code Section 10753.

CLWA adopted the Groundwater Management Plan (GWMP) on December 10, 2003. The GWMP contains four management objectives for the Basin, including (1) development of an integrated surface water, groundwater and recycled water supply to meet existing and projected demands for municipal, agricultural and other water uses; (2) assessment of Basin conditions to determine a range of operational yield values that use local groundwater conjunctively with supplemental SWP supplies and recycled water to avoid groundwater overdraft; (3) preservation of groundwater quality, and active characterization and resolution of groundwater contamination problems, including perchlorate; and (4) preservation of interrelated surface water resources, which includes managing groundwater in a manner that does not adversely impact surface and groundwater discharges or quality to downstream basins.

In 2001, prior to adoption of the GWMP, a local Memorandum of Understanding (MOU) process among CLWA, the purveyors, and United Water Conservation District (UWCD) in neighboring Ventura County had produced the beginning of local groundwater management, now embodied in the GWMP. The MOU is a collaborative and integrated approach to several of the aspects of water resource management included in the GWMP. UWCD manages surface water and groundwater resources in seven groundwater basins, all located in Ventura County, downstream of the Basin. As a result of the MOU, the cooperating agencies have undertaken the following measures: (1) integrated their database management efforts; (2) developed and utilized a numerical groundwater flow model for analysis of groundwater basin yield and containment of groundwater contamination; and (3) continued to monitor and report on the status of Basin conditions, as well as on geologic and hydrologic aspects of the overall stream-aquifer system.

The adopted GWMP includes 14 elements intended to accomplish the Basin management objectives listed above. In summary, the plan elements include:

- Monitoring of groundwater levels, quality, production and subsidence
- Monitoring and management of surface water flows and quality
- Determination of basin yield and avoidance of overdraft
- Development of average and dry-year emergency water supply
- Continuation of conjunctive use operations
- Long-term salinity management
- Integration of recycled water
- Identification and mitigation of soil and groundwater contamination, including involvement with other local agencies in investigation, cleanup, and closure
- Development and continuation of local, state and federal agency relationships
- Groundwater management reports
- Continuation of public education and water conservation programs
- Identification and management of recharge areas and wellhead protection areas
- Identification of well construction, abandonment, and destruction policies
- Provisions to update the groundwater management plan

Work on a number of the GWMP elements has been ongoing. An important aspect of this work was completion of the 2005 Basin Yield Report. The primary determinations made in that report are that (1) both the Alluvial aquifer and the Saugus Formation are sustainable sources at the operational plan yields stated in the 2005 UWMP over the next 25 years, (2) the yields are not overstated and will not deplete or “dry up” the groundwater basin, and (3) there is no need to reduce the yields shown in the 2005 UWMP. Additionally, the 2005 Basin Yield Report concluded that neither the Alluvial aquifer nor the Saugus Formation is in an overdraft condition, or projected to become overdrafted.

## ***UWMP***

In December 2005, the CLWA and three local retail purveyors, the Santa Clarita Water Division of CLWA (SCWD), Newhall County Water District (NCWD), and Valencia Water Company (VWC), completed preparation of the 2005 UWMP for the CLWA service area. The 2005 UWMP builds upon previous

documents, specifically, the 2000 UWMP and the 2005 Groundwater Perchlorate Contamination Amendment and Other Amendments to the 2000 UWMP. The focus of the 2005 Amendment was on updating the significant progress made by CLWA, the local water purveyors, federal and state regulatory agencies, and others in responding to the perchlorate-contaminated groundwater in portions of the Saugus Formation and Alluvial aquifer, the two aquifer systems that comprise the local Santa Clara River Valley East Groundwater Subbasin, which is the source of the local groundwater used to meet portions of the Santa Clarita Valley's potable water supply.

The 2005 UWMP presents updated information on historic and current water usage and the methodology used to project future water demands within the CLWA service area. In addition, the 2005 UWMP describes the water supplies available to CLWA and the local retail purveyors from 2005 to 2030, the 25-year period covered by the plan. The 2005 UWMP also assesses water supply reliability over the next 25-year period in 5-year increments in average, dry, and multiple-dry years. CLWA's 2010 UWMP is currently being prepared, and completion is expected by late 2010 or early 2011.

## THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* identify certain criteria for determining whether any significant impact will result with the implementation of the proposed General Plan. The criteria listed below are based on Appendix G of the *State CEQA Guidelines*. The proposed General Plan would normally have a significant impact on water resources if it would

- have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed; or
- substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).

In addition to the above criteria, and given the presence of ammonium perchlorate created by other land uses in the Santa Clarita Valley, impacts to water resources would be significant if implementation of the proposed project would

- result in the spreading of perchlorate in groundwater beyond the wells currently affected by perchlorate.

## IMPACT ANALYSIS

This impact analysis section evaluates the potential effects of the proposed General Plan policies on water services within the Planning Area using the *State CEQA Guidelines* thresholds of significance.

## Water Supply and Demand Impacts

**Impact 3.13-1** Have insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed.

### *Existing Conditions Plus General Plan Water Demand and Supply*

#### Within CLWA Service Area

This section describes the existing development demand in the Planning Area plus the water demands of Plan implementation, measured against existing known supplies. **Table 3.13-12, Existing Plus General Plan Demand and Supply – Within CLWA Service Area**, illustrates that within the CLWA service area, existing supplies exceed demand by approximately 50,400 af if the land uses allowed by OVOV were to be fully built out today, and impacts (including cumulative impacts) would be less than significant.

**Table 3.13-12**  
**Existing Plus General Plan Demand and Supply – Within CLWA Service Area**

	2009 Demand	(acre-feet)
2009 Demand (Actual) <sup>1</sup>		86,538
Additional Demand to Buildout (2050)		48,912
<b>Total Existing Plus Additional OVOV Demand <sup>13</sup></b>		<b>135,450</b>
<b>Available 2009 Supplies</b>		
Local Groundwater <sup>2</sup>		
Alluvial aquifer		39,986
Saugus Formation		7,678
	Subtotal Local Groundwater	<b>47,664</b>
Imported Supplies		
Table A Amount <sup>3</sup>		38,080
Net Carryover from 2008 <sup>4</sup>		10,107
Buena Vista/Rosedale-Rio Bravo <sup>5</sup>		11,000
Yuba Accord		1,658
Flexible Storage Account (CLWA) <sup>6</sup>		0
Flexible Storage Account (Ventura County) <sup>7</sup>		0
2009 SWP Turnback Pool Water		52
Semitropic Water Banking and Exchange Program <sup>12</sup>		1,650
Nickel Water – Newhall Land		1,607
	Subtotal Imported Supplies	<b>68,657</b>

2009 Demand	(acre-feet)	
Recycled Water	328	328
<b>Total Available 2009 Supplies</b>		<b>116,649</b>
<b>Additional Dry-Year Supplies<sup>8</sup></b>		
Semitropic Water Bank		<b>45,920</b>
2002 Account <sup>9</sup>	16,650	
2003 Account <sup>9</sup>	29,270	
Rosedale-Rio Bravo Banking and Exchange Program		<b>20,000</b>
2005-2006 Buena Vista/Rosedale-Rio Bravo Water Acquisition Agreement and Banking of Table A in 2005-2007 <sup>10 11</sup>	20,000	
Semitropic Water Bank – Newhall Land <sup>12</sup>	3,300,	<b>3,300</b>
<b>Total Additional 2009 Dry-Year Supplies</b>		<b>69,220</b>
<b>Total Available Supplies</b>		<b>185,869</b>
<b>Less Existing Plus Additional OVOV Demand <sup>13</sup></b>		<b>(135,450)</b>
<b>Available Existing Supplies Above Demand</b>		<b>50,419</b>

## Notes:

<sup>1</sup> See 2009 Water Report, p. ES-1 (May 2010). Includes demand of private well owners within the East Subbasin of 500 afy.

<sup>2</sup> See 2009 Water Report, pp. ES-1 - ES-2 (May 2010).

<sup>3</sup> CLWA's SWP Table A Amount is 95,200 af. The final 2009 allocation was 40%, or 38,080 af.

<sup>4</sup> Amount used by CLWA in 2009.

<sup>5</sup> 2008 annual supply from Buena Vista/Rosedale-Rio Bravo Water Acquisition Agreement.

<sup>6</sup> CLWA can directly utilize up to 4,684 af of storage capacity in Castaic Lake.

<sup>7</sup> By agreement in 2005, CLWA can also utilize 1,376 af of Ventura County SWP contractors' flexible storage capacity in Castaic Lake.

<sup>8</sup> Does not include other reliability measures available to CLWA and the retail water purveyors. These measures include short-term exchanges, participation in DWR's dry-year water purchase programs, local dry-year supply programs, and other future groundwater storage programs.

<sup>9</sup> Net recoverable water after banking is 24,000 af and 32,522 af in 2002 and 2003, respectively.

<sup>10</sup> Net recoverable water after banking is 20,000 af in each year.

<sup>11</sup> Water stored in Rosedale-Rio Bravo Banking and Exchange Program pursuant to the Buena Vista/Rosedale-Rio Bravo Water Acquisition Agreement.

<sup>12</sup> Supply shown is the stored water that can be extracted from the Semitropic Groundwater Storage Bank by The Newhall Land and Farming Company for the Newhall Ranch Specific Plan in dry years. years minus the 1,650 af also shown in this table under "Semitropic Water Banking and Exchange Program." Together, the total is 4,950 af. The total amount currently in storage is 18,828 af. Newhall Ranch is located within the CLWA service area. Delivery of stored water requires further agreements between CLWA and Newhall Land.

<sup>13</sup> Demand includes private well owners within the East Subbasin.

### Outside CLWA Service Area

For portions of the Planning Area not served by a municipal water purveyor with access to groundwater within the East Subbasin, both within and outside of the CLWA service area boundary, current demands are met through the use of private groundwater wells. The purveyors estimate that private well owners within the East Subbasin use approximately 500 af of water per year. For the portion of the Planning Area generally east of the CLWA service area and outside of the East Subbasin (within unincorporated Los Angeles County), private wells in the Holocene alluvium and Pleistocene terrace deposits provide access to groundwater for the rural land uses that exist in this area (generally between the East Subbasin to the west and the Acton Valley Groundwater Basin to the east). As indicated above, very limited data is available regarding the past and current condition of this area from a groundwater production perspective, thereby creating a level of uncertainty regarding the ability of this area to sustainably support existing land uses or an increase in development activity. No studies are known to have been completed for this portion of the Planning Area indicating the amount of water historically and currently pumped from the ground, the amount of groundwater in storage, or the sustainable yield of that groundwater on an annual basis. Experience of private well owners in this area indicates declining groundwater well levels and, depending on location, in some cases wells running dry. In the instances of wells running dry, water has been trucked in to private water tanks in order to provide necessary water supplies to existing homes. Based on this existing condition and the lack of available and responsive information, it is apparent that existing groundwater is not sufficient to provide a sustainable supply of water for all existing residents without having to employ alternative water sources, such as the trucking in of water. Consequently, with an estimated buildout water demand of 6,000 afy in this area significant impacts (including cumulative impacts) would, without mitigation, result if Plan implementation in this area were to increase the number of lots over the existing condition.

### *OVOV Buildout Water Supply and Demand*

The following discussion focuses on impacts (including cumulative impacts) to water availability for the OVOV Planning Area. Two areas are analyzed including one for the portion of the Planning Area within CLWA's service area and with access to East Subbasin groundwater, and a second for the area outside CLWA's service area without access to East Subbasin groundwater. Buildout is assumed to occur in 2050.

- **Area 1.** Buildout within the CLWA service area (referred to as the "2050 Build-Out Scenario – Within CLWA Boundary").
- **Area 2.** Buildout outside the CLWA service area (referred to as the "2050 Build-Out Scenario – Outside CLWA Boundary").

### **Area 1: 2050 Build-Out Scenario – Within CLWA Boundary**

Area 1 entails buildout of lands within CLWA's service area under the proposed OVOV land-use designations by the year 2050. **Tables 3.13-13 through 3.13-15, 2050 Buildout Water Demand and Supplies – Within CLWA Boundary**, summarize the water demand and supply for this buildout scenario. These tables present information for average/normal years, single-dry years and for multi-dry year periods. As presented in the tables, water supply is broken down into existing and planned water supply sources, including wholesale (imported) water, local supplies, and banking programs. Dry year demands reflected on the **Tables 3.13-14 and 3.13-15** present the effects of an estimated 10 percent urban reduction as described in the 2005 UWMP resulting from the implementation of conservation Best Management Practices. Demands do not reflect 20 percent urban per capita reduction by 2020 resulting from the recently approved California legislation (see discussion of SB 7X-7, above). The amount of additional conservation expected in the Santa Clarita Valley as a result of this bill is the subject of study in the 2010 Urban Water Management Plan (2010 UWMP) presently being prepared by CLWA. The 2010 UWMP is expected to be released no later than June 2011. As shown, under Area 1 (buildout within the CLWA service area and East Subbasin), there would be adequate water supplies with no significant water supply impacts occurring in average, single-dry or multi-dry year periods.

Dry year supplies available above demand reflect water supplies that would be called upon by CLWA and the local purveyors in dry years. CLWA and the local purveyors would typically secure water from these supplies only in amounts necessary to meet demand. For a dry year, when reliability of the SWP could be reduced, CLWA would utilize both dry year supplies available from the Saugus aquifer, and water banking and conjunctive use projects.



**Table 3.13-13**  
**2050 Buildout Water Demand and Supplies – Within CLWA Boundary (acre-feet per year) Average/Normal Year**

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
<b>Existing Supplies</b>							
Wholesale (Imported)							
SWP Table A Supply (1)	57,100	57,100	57,100	57,100	57,100	57,100	57,100
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land	1,607	1,607	1,607	1,607	1,607	1,607	1,607
Flexible Storage Account (CLWA) (2)	0	0	0	0	0	0	0
Flexible Storage Account (Ventura County) (2)	0	0	0	0	0	0	0
Local Supplies							
Groundwater							
-Alluvial Aquifer	35,000	35,000	35,000	35,000	35,000	35,000	35,000
-Saugus Formation	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Recycled Water	1,700	1,700	1,700	1,700	1,700	1,700	1,700
<b>Total Existing Supplies</b>	<b>117,407</b>	<b>117,407</b>	<b>117,407</b>	<b>117,407</b>	<b>117,407</b>	<b>117,407</b>	<b>117,407</b>
<b>Existing Banking Programs</b>							
Semitropic Water Bank (2)	0	0	0	0	0	0	0
Rosedale-Rio Bravo (2)	0	0	0	0	0	0	0
Semitropic Water Bank – Newhall Land (2)	0	0	0	0	0	0	0
<b>Total Existing Banking Programs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Planned Supplies</b>							
Local Supplies							
Groundwater							
-Restored wells (Saugus Formation) (2)	0	0	0	0	0	0	0
-New Wells (Saugus Formation) (2)	0	0	0	0	0	0	0

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
Recycled Water - CLWA (3)	0	1,600	6,300	11,000	15,700	15,700	15,700
Recycled Water - Newhall Ranch	0	1,500	2,500	3,500	5,400	5,400	5,400
<b>Total Planned Supplies</b>	<b>0</b>	<b>3,100</b>	<b>8,800</b>	<b>14,500</b>	<b>21,100</b>	<b>21,100</b>	<b>21,100</b>
<b>Planned Banking Programs</b>							
Additional Planned Banking (2)	0	0	0	0	0	0	0
<b>Total Planned Banking Programs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Existing and Planned Supplies and Banking</b>	<b>117,407</b>	<b>120,507</b>	<b>126,207</b>	<b>131,907</b>	<b>138,507</b>	<b>138,507</b>	<b>138,507</b>
<b>Total Estimated Demand (w/o conservation)</b>	<b>84,508</b>	<b>93,526</b>	<b>101,044</b>	<b>108,261</b>	<b>116,279</b>	<b>124,297</b>	<b>149,700</b>
<b>Conservation (4)</b>	<b>(7,001)</b>	<b>(7,903)</b>	<b>(8,804)</b>	<b>(9,706)</b>	<b>(10,608)</b>	<b>(11,510)</b>	<b>(14,250)</b>
<b>Total Adjusted Demand</b>	<b>77,507</b>	<b>85,623</b>	<b>92,240</b>	<b>98,555</b>	<b>105,671</b>	<b>112,787</b>	<b>135,450</b>
<b>Supply Surplus/(Deficit)</b>	<b>39,900</b>	<b>34,884</b>	<b>33,967</b>	<b>33,352</b>	<b>32,836</b>	<b>25,720</b>	<b>3,057</b>

- (1) SWP supplies are calculated by multiplying CLWA's Table A Amount of 95,200 af by percentages of average deliveries projected to be available, based on Tables 6-12 and 6-13 of DWR's "State Water Project Delivery Reliability Report 2009." Year 2030 figure is calculated by multiplying by DWR's 2029 percentage of 60%.
- (2) Not needed during average/normal years.
- (3) Recycled water supplies based on projections provided in CLWA's 2005 UWMP Chapter 4, Recycled Water.
- (4) Assumes 10 percent reduction on urban portion of total demand resulting from conservation best management practices, as discussed in CLWA's 2005 UWMP, Chapter 7. Does not include a 20% per capita reduction by 2020 resulting from the implementation of SB 7x-7.

**Table 3.13-14**  
**2050 Buildout Water Demand and Supplies – Within CLWA Boundary (acre-feet per year)**  
**Single Dry Year**

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
<b>Existing Supplies</b>							
Wholesale (Imported)							
SWP Table A Supply (1)	6,700	6,700	7,600	8,600	9,500	9,500	9,500
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land	1,607	1,607	1,607	1,607	1,607	1,607	1,607
Flexible Storage Account (CLWA)	4,680	4,680	4,680	4,680	4,680	4,680	4,680
Flexible Storage Account (Ventura County)(2)	1,380	1,380	0	0	0	0	0
Local Supplies							
Groundwater							
Alluvial Aquifer	32,500	32,500	32,500	32,500	32,500	32,500	32,500
Saugus Formation	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Recycled Water	1,700	1,700	1,700	1,700	1,700	1,700	1,700
<b>Total Existing Supplies</b>	<b>74,567</b>	<b>74,567</b>	<b>74,087</b>	<b>75,087</b>	<b>75,087</b>	<b>76,987</b>	<b>76,987</b>
<b>Existing Banking Programs</b>							
Semitropic Water Bank (3)	17,000	0	0	0	0	0	0
Rosedale-Rio Bravo (5)	20,000	20,000	20,000	20,000	20,000	20,000	20,000
Semitropic Water Bank – Newhall Land (9)	4,950	4,950	4,950	4,950	4,950	4,950	4,950
<b>Total Existing Banking Programs</b>	<b>41,950</b>	<b>24,950</b>	<b>24,950</b>	<b>24,950</b>	<b>24,950</b>	<b>24,950</b>	<b>24,950</b>
<b>Planned Supplies</b>							
Local Supplies							
Groundwater							
Restored wells (Saugus Formation)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
New Wells (Saugus Formation)	0	0	10,000	10,000	10,000	10,000	10,000

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
Recycled Water - CLWA (4)	0	1,600	6,300	11,000	15,700	15,700	15,700
Recycled Water - Newhall Ranch	0	1,500	2,500	3,500	5,400	5,400	5,400
<b>Total Planned Supplies</b>	<b>10,000</b>	<b>13,100</b>	<b>28,800</b>	<b>34,500</b>	<b>41,100</b>	<b>41,000</b>	<b>41,000</b>
<b>Planned Banking Programs</b>							
Additional Planned Banking (6)	0	20,000	20,000	20,000	20,000	20,000	20,000
<b>Total Planned Banking Programs</b>	<b>0</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>	<b>20,000</b>
<b>Total Existing and Planned Supplies and Banking</b>	<b>126,517</b>	<b>132,617</b>	<b>147,837</b>	<b>154,537</b>	<b>162,037</b>	<b>162,037</b>	<b>162,037</b>
<b>Total Estimated Demand (w/o conservation) (7)</b>	<b>91,509</b>	<b>101,429</b>	<b>109,848</b>	<b>117,967</b>	<b>126,887</b>	<b>135,807</b>	<b>163,950</b>
<b>Conservation (8)</b>	<b>(7,001)</b>	<b>(7,903)</b>	<b>(8,804)</b>	<b>(9,706)</b>	<b>(10,608)</b>	<b>(11,510)</b>	<b>(14,250)</b>
<b>Total Adjusted Demand</b>	<b>84,508</b>	<b>93,526</b>	<b>101,044</b>	<b>108,261</b>	<b>116,279</b>	<b>124,297</b>	<b>149,700</b>
<b>Supply Surplus/(Deficit)</b>	<b>42,009</b>	<b>39,091</b>	<b>46,793</b>	<b>46,267</b>	<b>45,758</b>	<b>37,740</b>	<b>12,337</b>

- (1) SWP supplies are calculated by multiplying CLWA's Table A Amount of 95,200 af by percentages of single dry year deliveries projected to be available on Tables 6-4 and 6-13 of DWR's "State Water Project Delivery Reliability Report 2009." Year 2030 figure is calculated by multiplying by DWR's 2029 percentage of 11%.
- (2) Initial term of the Ventura County entities' flexible storage account is 10 years (from 2006 to 2015).
- (3) The total amount of water currently in storage is 50,870 af, available through 2013. Withdrawals of up to this amount are potentially available in a dry year, but given possible competition for withdrawal capacity with other Semitropic banking partners in extremely dry years, it is assumed here that about one third of the total amount stored could be withdrawn.
- (4) Recycled water supplies based on projections provided in CLWA's 2005 UWMP Chapter 4, Recycled Water.
- (5) CLWA has 64,898 af of recoverable water as of 12/31/09 in the Rosedale-Rio Bravo Water Banking and Recovery Program.
- (6) Assumes additional planned banking supplies available by 2014.
- (7) Assumes increase in total demand of 10 percent during dry years.
- (8) Assumes 10 percent reduction on urban portion of total normal year demand resulting from conservation best management practices ([urban portion of total normal year demand x 1.10] \* 0.10), as discussed in CLWA's 2005 UWMP, Chapter 7. Does not include 20% per capita reduction by 2020 resulting from SB7x-7.
- (9) Delivery of stored water from the Newhall Land Semitropic Groundwater Bank requires further agreements between CLWA and Newhall Land.

**Table 3.13-15**  
**2050 Buildout Water Demand and Supplies – Within CLWA Boundary (acre-feet per year)**  
**Multi-Year Drought (1)**

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
<b>Existing Supplies</b>							
Wholesale (Imported)							
SWP Table A Supply (2)	33,300	33,300	33,300	33,300	33,300	33,300	33,300
Buena Vista-Rosedale	11,000	11,000	11,000	11,000	11,000	11,000	11,000
Nickel Water - Newhall Land	1,607	1,607	1,607	1,607	1,607	1,607	1,607
Flexible Storage Account (CLWA) (3)	1,170	1,170	1,170	1,170	1,170	1,170	1,170
Flexible Storage Account (Ventura County) (3)	340	340	0	0	0	0	0
Local Supplies							
Groundwater							
Alluvial Aquifer	32,500	32,500	32,500	32,500	32,500	32,500	32,500
Saugus Formation (4)	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Recycled Water	1,700	1,700	1,700	1,700	1,700	1,700	1,700
<b>Total Existing Supplies</b>	<b>96,617</b>	<b>96,617</b>	<b>96,277</b>	<b>96,277</b>	<b>96,277</b>	<b>96,277</b>	<b>96,277</b>
<b>Existing Banking Programs</b>							
Semitropic Water Bank (3)	12,700	0	0	0	0	0	0
Rosedale-Rio Bravo (6) (7)	5,000	15,000	15,000	15,000	15,000	15,000	15,000
Semitropic Water Bank – Newhall Land (11)	4,950	4,950	4,950	4,950	4,950	4,950	4,950
<b>Total Existing Banking Programs</b>	<b>22,650</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>	<b>19,950</b>
<b>Planned Supplies</b>							
Local Supplies							
Groundwater							
Restored wells (Saugus Formation) (4)	6,500	6,500	5,000	5,000	5,000	5,000	5,000

Water Supply Sources	Supply (af)						
	2010	2015	2020	2025	2030	2035	2050
New Wells (Saugus Formation) (4)	0	0	1,500	1,500	1,500	1,500	1,500
Recycled Water (5)	0	1,600	6,300	11,000	15,700	15,700	15,700
Recycled Water - Newhall Ranch	0	1,500	2,500	3,500	5,400	5,400	5,400
<b>Total Planned Supplies</b>	<b>6,500</b>	<b>9,600</b>	<b>15,300</b>	<b>21,000</b>	<b>27,600</b>	<b>27,600</b>	<b>27,600</b>
<b>Planned Banking Programs</b>							
Additional Planned Banking (7) (8)	0	5,000	15,000	15,000	15,000	15,000	15,000
<b>Total Planned Banking Programs</b>	<b>0</b>	<b>5,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>	<b>15,000</b>
<b>Total Existing and Planned Supplies and Banking</b>	<b>125,767</b>	<b>131,167</b>	<b>146,527</b>	<b>152,227</b>	<b>158,827</b>	<b>158,827</b>	<b>158,827</b>
<b>Total Estimated Demand (w/o conservation) (9)</b>	<b>91,509</b>	<b>101,429</b>	<b>109,848</b>	<b>117,967</b>	<b>126,887</b>	<b>135,807</b>	<b>163,950</b>
<b>Conservation (10)</b>	<b>(7,001)</b>	<b>(7,903)</b>	<b>(8,804)</b>	<b>(9,706)</b>	<b>(10,608)</b>	<b>(11,510)</b>	<b>(14,250)</b>
<b>Total Adjusted Demand</b>	<b>84,508</b>	<b>93,526</b>	<b>101,044</b>	<b>108,261</b>	<b>116,279</b>	<b>124,297</b>	<b>149,700</b>
<b>Supply Surplus/(Deficit)</b>	<b>41,259</b>	<b>37,641</b>	<b>45,483</b>	<b>43,966</b>	<b>42,548</b>	<b>34,530</b>	<b>9,127</b>

(1) Supplies shown are annual averages over four consecutive dry years (unless otherwise noted).

(2) SWP supplies are calculated by multiplying CLWA's Table A Amount of 95,200 af by percentages of average deliveries projected to be available during the worst case four-year drought of 1931-1934 as provided in Tables 6-4 and 6-13 of DWR's "State Water Project Delivery Reliability Report 2009." Year 2030 figure is calculated by multiplying by DWR's 2029 percentage of 35%.

(3) Based on total amount of storage available divided by 4 (4-year dry period). Initial term of the Ventura County entities' flexible storage account is 10 years (from 2006 to 2015).

(4) Total Saugus pumping is the average annual amount that would be pumped under the groundwater operating plan, as summarized in Table 3-6 of the 2005 UWMP  $([11,000+15,000+25,000+35,000]/4)$ .

(5) Recycled water supplies based on projections provided in CLWA's 2005 UWMP Chapter 4, Recycled Water.

(6) CLWA has 64,898 af of recoverable water as of 12/31/09 in the Rosedale-Rio Bravo Water Banking and Recovery Program.

(7) Average dry year period supplies could be up to 20,000 af for each program depending on storage amounts at the beginning of the dry period.

(8) Assumes additional planned banking supplies available by 2014.

(9) Assumes increase in total demand of 10 percent during dry years.

(10) Assumes 10 percent reduction on urban portion of total normal year demand resulting from conservation best management practices  $([urban\ portion\ of\ total\ normal\ year\ demand \times 1.10] \times 0.10)$ , as discussed in CLWA's 2005 UWMP, Chapter 7.

(11) Delivery of stored water from the Newhall Land Semitropic Groundwater Bank requires further agreements between CLWA and Newhall Land.

## **Area 2: 2050 Build-Out Scenario – Outside CLWA Boundary**

As indicated above, buildout water demand for the portion of the Planning Area generally east of the CLWA service area and outside of the East Subbasin (within unincorporated Los Angeles County), private wells in the Holocene alluvium and Pleistocene terrace deposits provide access to groundwater for the rural land uses that exist in this area (generally between the East Subbasin to the west and the Acton Valley Groundwater Basin to the east). Very limited data is available regarding the past and current condition of this area from a groundwater production perspective, thereby creating a level of uncertainty regarding the ability of this area to sustainably support existing land uses or buildout of this area under OVOV. No studies are known to have been completed for this portion of the Planning Area indicating the amount of water historically and currently pumped from the ground, the amount of groundwater in storage, or the sustainable yield of that groundwater on an annual basis. Experience of private well owners in this area indicates declining groundwater well levels and, depending on location, in some cases wells running dry. In the instances of wells running dry, water has been trucked in to private water tanks to provide necessary water supplies to existing homes. Based on this existing condition and the lack of available and responsive information, it is apparent that existing groundwater is not sufficient to provide a sustainable supply of water for all existing residents without having to employ alternative water sources, such as the trucking in of water. Consequently, with an estimated buildout water demand of 6,000 afy in this area, significant impacts (including cumulative impacts) would result if Plan implementation in this area were to increase the number of lots and population over the existing condition.

### ***Plan to Plan Analysis***

When compared with the existing City General Plan and County Area Plan, OVOV will result in a larger City population within the Planning Area and a lower County population at buildout. Consequently, water demands at buildout would be greater under OVOV in the City and within the CLWA service area and East Subbasin. Demands at buildout would be reduced in the County under OVOV. As is described above, an adequate supply of water would be available to serve the existing City population and the OVOV population increase in the CLWA service area and East Subbasin. However, even though buildout population would decrease from the existing County Area Plan population of 249,524 to 237,387 under OVOV, significant impacts would still occur outside the CLWA service area and the East Subbasin due to existing constrained water supplies. Consequently, due to the current groundwater-constrained setting in locations outside the CLWA service area and the East Subbasin, water supply impacts would be significant under either the existing County Area Plan or OVOV if any additional development or population occurs in this area without mitigation.



## Groundwater Supply Impacts

**Impact 3.13-2**                      **Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses).**

### *Within CLWA Service Area*

Supplying water to the City and the portions of the County within the CLWA service area as they are built out under the proposed General Plan and Area Plan would not substantially deplete groundwater supplies, based on the previous discussion. As indicated, there are sufficient local groundwater supplies in conjunction with existing imported supplies and anticipated planned supplies to support the planned land uses, in addition to existing development in the City and the portions of the County within the CLWA service area. As stated above, groundwater supplies were evaluated in the 2005 UWMP, the 2005 Basin Yield Report, and the 2009 Basin Yield Update. This evaluation resulted in the following findings: (a) both the Alluvial aquifer and the Saugus Formation are reasonable and sustainable sources of local water supplies at the yields stated in the 2005 UWMP over the next 25 years; (b) the yields are not overstated and will not deplete or “dry-up” the groundwater basin; and (c) there is no need to reduce the yields for purposes of planning, as shown in the 2005 UWMP, the 2005 Basin Yield Report, and the 2009 Basin Yield Update (see **Appendix 3.13** for the 2005 UWMP, the 2005 Basin Yield Report, and the 2009 Basin Yield Update). In addition, the 2005 UWMP, 2005 Basin Yield Report, and 2009 Basin Yield Update determined that neither the Alluvial aquifer nor the Saugus Formation is in an overdraft condition, or projected to become overdrafted. As a result, none of the physical effects normally associated with an overdrafted basin (e.g., subsidence, reduction in water quality) would occur. Based on this information, impacts to groundwater supplies would be less than significant within the CLWA service area and East Subbasin.

### *Outside CLWA Service Area*

For the portion of the Planning Area generally east of the CLWA service area and outside of the East Subbasin (within unincorporated Los Angeles County), private wells in the Holocene alluvium and Pleistocene terrace deposits provide access to groundwater for the rural land uses that exist in this area (generally between the East Subbasin to the west and the Acton Valley Groundwater Basin to the east). Very limited data is available regarding the past and current condition of this area from a groundwater

production perspective, thereby creating a level of uncertainty regarding the ability of this area to sustainably support existing land uses or buildout of this area under OVOV. No studies are known to have been completed for this portion of the Planning Area indicating the amount of water historically and currently pumped from the ground, the amount of groundwater in storage, or the sustainable yield of that groundwater on an annual basis. Experience of private well owners in this area indicates declining groundwater well levels and, depending on location, in some cases wells running dry. In the instances of wells running dry, water has been trucked in to private water tanks to provide necessary water supplies to existing homes. Based on this existing condition and the lack of available and responsive information, it is apparent that existing groundwater is not sufficient to provide a sustainable supply of water for all existing residents without having to employ alternative water sources, such as the trucking in of water. Consequently, with an estimated buildout water demand of 6,000 afy in this area, significant groundwater impacts (including cumulative impacts) would result if plan implementation in this area were to increase the number of lots over the existing condition.

***Proposed Area Plan Goals, Objectives, and Policies – Water Supply Demand and Groundwater Supply***

**Goal LU 4:** A diverse and healthy economy.

**Objective LU 4.5:** Ensure creation of attractive and technology-friendly business environments to attract tenants and employees.

**Policy LU 4.5.2:** Encourage the provision of usable open space that is accessible to employees and visitors, and discourage the provision of large areas of water-consuming landscaping that are not usable or accessible.

**Policy LU 4.5.3:** Promote the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features.

**Goal LU 7:** Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.

**Objective LU 7.2:** Ensure an adequate water supply to meet the demands of growth.

**Policy LU 7.2.1:** Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.

**Policy LU 7.2.2:** If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the Area Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.

**Policy LU 7.2.3:** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

**Objective LU 7.4:** Promote water conservation through building and site design.

**Policy LU 7.4.1:** Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.

**Policy LU 7.4.2:** Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.

**Goal CO.1:** A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.

**Objective CO 1.1:** Protect the capacity of the natural “green” infrastructure to absorb and break down pollutants, cleanse air and water, and prevent flood and storm damage.

**Policy CO 1.1.1:** In making land use decisions, consider the complex, dynamic, and interrelated ways that natural and human systems interact,

such as the interactions between energy demand, water demand, air and water quality, and waste management.

**Goal CO 4:** An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

**Objective CO 4.1:** Promote water conservation as a critical component of ensuring adequate water supply for Santa Clarita Valley residents and businesses.

**Policy CO 4.1.1:** In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.

**Policy CO 4.1.2:** Provide examples of water conservation in landscaping through use of low water use landscaping in public spaces such as parks, landscaped medians and parkways, plazas, and around public buildings.

**Policy CO 4.1.3:** Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass.

**Policy CO 4.1.4:** Provide informational materials to applicants and contractors on the Castaic Lake Water Agency's Landscape Education Program, and/or other information on xeriscape, native California plants, and water-conserving irrigation techniques as materials become available.

**Policy CO 4.1.5:** Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.

**Policy CO 4.1.6:** Support amendments to the County Building Code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings.

**Policy CO 4.1.7:** Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the

extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.

**Policy CO 4.1.8:** Upon the availability of non-potable water services, discourage and consider restrictions on the use of potable water for washing outdoor surfaces.

**Objective CO 4.2:** Work with water providers and other agencies to identify and implement programs to increase water supplies to meet the needs of future growth.

**Policy CO 4.2.1:** In cooperation with the Sanitation District, water purveyors and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.

**Policy CO 4.2.2:** Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.

**Policy CO 4.2.3:** Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable.

**Policy CO 4.2.5:** Participate and cooperate with other agencies to complete, adopt, and implement an Integrated Regional Water Management Plan to build a diversified portfolio of water supply, water quality, and resource stewardship priorities for the Santa Clarita Valley.

**Policy CO 4.2.6:** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

**Goal CO 8:** Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

**Objective CO 8.3:** Encourage green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

**Policy CO 8.3.3:** Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

### ***Effectiveness of Area Plan Goals, Objectives, and Policies***

As stated above, and as shown in this water analysis there would be an adequate supply of water available to meet the demands for buildout of the City's proposed General Plan and the County's proposed Area Plan within the CLWA service area and the East Subbasin (**Goal CO 4, Objective LU 7.2**). The supply available to meet the City's projected potable water demand, and the County's projected portable water demand within the CLWA service area, will be met by existing local supplies and imported SWP and non-SWP imported water supplied by the CLWA and Santa Clarita Valley water purveyors (**Objective CO 4.2**). Other policies created to ensure an adequate supply of water is available to residents and businesses in the Planning Area include: **Policy CO 4.2.6, Policy LU 7.2.1, Policy LU 7.2.3, and Policy 4.2.5**. These goals, objectives, and policies are equally appropriate for Plan implementation in the County, including portions of the Planning Area within and outside the CLWA service area. This is especially the case in areas outside of the East Subbasin, where groundwater from Holocene alluvium and terrace deposits is the only source of water. As reported above, water supplies in this area are currently constrained, and are not in sufficient quantities to sustainably support existing or additional development.

Assisting in reducing the demand for potable water is the use of non-potable/recycled water. The availability of recycled water is not yet sufficient to meet all of the present and future demands, but plans of the Santa Clarita Valley water purveyors indicate that it will become increasingly available as demands for potable water increase and supporting infrastructure is constructed during the City's and County's buildout in the Planning Area (**Objective CO 4.2, Policy CO 4.2.1**). Recycled supplies include recycled water from the existing Valencia WRP and from the approved Newhall Ranch WRP once it becomes operational. **Policy CO 4.2.5** encourages the participation and cooperation with other agencies to develop and implement an Integrated Regional Water Management Plan to build a diversified portfolio of water supply, water quality, and resource stewardship priorities for the Santa Clarita Valley. The ability of the

purveyors to expand the use of recycled water is limited by various state water laws, codes, and court decisions. However, CLWA has prepared a Recycled Water Master Plan and implemented programs to use 1,700 afy of recycled water in the near-term, and over 17,000 afy in the long term. Other policies require new development to provide the infrastructure needed for the delivery of recycled (**Policy CO 4.2.2**); and promote the installation of rainwater capture and gray water systems in new buildings for irrigation (**Policy CO 4.2.3**). **Policy CO 4.1.8** states that upon the availability of non-potable water services, the City and County will discourage and consider restrictions on the use of potable water for washing outdoor surfaces.

Recent drought conditions illustrate the need for improved water efficiency and conservation. As a result, this EIR recommends that water efficiency and conservation measures be adopted as conditions of approval for land use entitlement(s) granted by the City and County. The City and County also support improved water efficiency and water conservation as a critical component of ensuring adequate water supply for Planning Area residents and businesses (**Objective CO 4.1, Objective LU 7.2, LU Policy 7.2.2**). **Policy CO 4.1.1** encourages coordination with applicable water suppliers to adopt and implement a water conservation strategy for public and private development. **Policy LU 7.2.1** stipulates that the City and County should monitor growth and coordinate with the water districts as needed to ensure that long-range needs for potable and reclaimed water will be met. Plan policies also promote the provision of informational materials to applicants and contractors on the Castaic Lake Water Agency's Landscape Education Program (**Policy CO 4.1.4**), promote examples of water conservation in landscaping through the use of xeriscape or low water use landscaping in public spaces (**Policy CO 4.1.2**), promote the use of low water use landscaping design into new residential subdivisions and other private development projects through the use of native California plant materials and evapotranspiration (smart) irrigation systems (**Policy CO 4.1.3, LU 7.4.1**).

Other Plan policies directed at water conservation promote the use of low-flow and waterless plumbing fixtures (**Policy CO 4.1.5, LU 7.4.2**), propose amendments to the building code to promote upgrades to water and energy efficiency when issuing permits for renovations or additions on existing buildings (**LU Objective 7.4, Policy CO 4.1.6**); apply water conservation policies to all pending development including tentative subdivision maps to the extent permitted by law; encourage water conservation in construction and landscape design (**Policy CO 4.1.7**); and upon the availability of non-potable water services discourage and/or consider restrictions on the use of potable water for washing outdoor surfaces (**Policy CO 4.1.8**).

The above policies reflect many of these initiatives and would effectively support water conservation measures underway in the City. Implementation of the above goals, objectives, and policies in



coordination with the CLWA and the local water purveyors relative to future development projects, would help to ensure that potential impacts on existing entitlements and supplies remain less than significant.

### ***Plan to Plan Analysis***

When compared with the existing City General Plan and County Area Plan, OVOV will result in a larger City population within the Planning Area and a lower County population. Consequently, water demands would be greater under OVOV in the City and within the CLWA service area and East Subbasin. Demands would be reduced in the County under OVOV. As is described above, an adequate supply of groundwater water would be available within the CLWA service area and East Subbasin to serve the existing City and County population and the projected OVOV population increase and the impacts associated with both current and proposed Plans would be less than significant. However, even though buildout population would decrease from the existing County Area Plan population of 249,524 to 237,387 under OVOV, significant impacts would still occur outside the CLWA service area and the East Subbasin due to existing constrained groundwater supplies. Consequently, in locations outside the CLWA service area and the East Subbasin, water supply impacts (including cumulative impacts) would be significant under either the existing County Area Plan or OVOV due to the current groundwater-constrained setting if any additional lots or population occurs in this area.

## **Groundwater Recharge Impacts**

### ***Within CLWA Service Area***

Supplying water to the buildout population of the City's and County's proposed Plans within the CLWA service area would not interfere substantially with groundwater recharge, because the best available evidence shows that no adverse impacts to the recharge of the Basin have occurred due to the existing or projected use of local groundwater supplies, consistent with the CLWA/purveyor groundwater operating plan for the Basin (see Appendix 3.13 [2005 Basin Yield Report]). In addition, based on the memorandum prepared by CH2MHill (Effect of Urbanization on Aquifer Recharge in the Santa Clarita Valley, February 22, 2004; **Appendix 3.13**), no significant cumulative impacts would occur to the groundwater basin with respect to aquifer recharge. This is because urbanization in the Santa Clarita Valley has been accompanied by long-term stability in pumping and groundwater levels, and the addition of imported SWP water to the valley, which together have not reduced recharge to groundwater, nor depleted the amount of groundwater in storage within the local groundwater basin. This finding is supported by the

2009 Basin Yield Update, which modeled infiltration from irrigation (from urban and agricultural lands), precipitation, and streamflows (stormwater and WRP discharges). The future operating plan for the basin has been evaluated in the 2005 UWMP, the 2005 Basin Yield Report and the 2009 Basin Yield Update, and none of the documents call for attempts to artificially recharge the basin.

Based on the information presented, no significant groundwater recharge impacts (including cumulative impacts) would result from Plan buildout within the CLWA service area and East Subbasin.

### ***Outside CLWA Service Area***

Based on related information presented above for the East Subbasin and the Acton Valley Groundwater Basin, it is expected that the portion of the Planning Area east of the East Subbasin is recharged from deep percolation of precipitation on valley floors and runoff in the Santa Clara River and its tributaries. The area could also be recharged by subsurface inflow, deep percolation of irrigation returns and returns from private subsurface sewage disposal systems. Outflow or discharge from the alluvium and terrace deposits occurs by water well extractions, subsurface outflow to the downstream East Subbasin to the west, subsurface outflow, depending on water levels, to the permeable or fractured portions of the Vasquez Formation and older crystalline or metamorphic rocks that underlie the alluvium and/or terrace deposits; and evapotranspiration in areas of phreatophytes that grow in the downstream reaches of the main river valley where rising water is known to occur. Given the rural character of land uses existing and proposed in this area under the OVOV Plan, and the relatively larger amount of open land area capable of retaining runoff infiltration characteristics, buildout of the Plan in this area would not expect to obstruct or limit groundwater recharge to an extent that significant recharge impacts (including cumulative impacts) would result.

### ***Proposed Area Plan Goals, Objectives, and Policies***

**Goal LU 7:** Environmentally responsible development through site planning, building design, waste reduction, and responsible stewardship of resources.

**Objective LU 7.3:** Protect surface and ground water quality through design of development sites and drainage improvements.

**Policy LU 7.3.1:** Promote the use of permeable paving materials to allow infiltration of surface water into the water table.

**Policy LU 7.3.2:** Maintain stormwater runoff on site by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.

**Policy LU 7.3.3:** Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.

**Objective CO 1.5:** Manage urban development and human-built systems to minimize harm to ecosystems, watersheds, and other natural systems, such as urban runoff treatment trains that infiltrate, treat and remove direct connections to impervious areas.

**Objective CO 2.3:** Conserve areas with significant mineral resources, and provide for extraction and processing of such resources in accordance with applicable laws and land use policies.

**Policy CO 2.3.5:** Promote remediation and restoration of mined land to a condition that supports beneficial uses, which may include but are not limited to recreational open space, habitat enhancement, groundwater recharge, or urban development.

**Goal CO 3:** Conservation of biological resources and ecosystems, including sensitive habitats and species.

**Objective CO 3.6:** Minimize impacts of human activity and the built environment on natural plant and wildlife communities.

**Policy CO 3.6.2:** Reduce impervious surfaces and provide more natural vegetation to enhance microclimates and provide habitat. In implementing this policy, consider the following design concepts:

- a. Consideration of reduced parking requirements, where supported by a parking study and/or through shared use of parking areas;

- b. Increased use of vegetated areas around parking lot perimeters; such areas should be designed as bioswales or as otherwise determined appropriate to allow surface water infiltration;
- c. Use of connected open space areas as drainage infiltration areas in lieu of curbed landscape islands, minimizing the separation of natural and landscaped areas into isolated “islands”;
- d. Breaking up large expanses of paving with natural landscaped areas planted with shade trees to reduce the heat island effect, along with shrubs and groundcover to provide diverse vegetation for habitat.

**Goal CO 4:** An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

**Objective CO 4.2:** Work with water providers and other agencies to identify and implement programs to increase water supplies to meet the needs of future growth.

**Policy CO 4.2.4:** Identify and protect areas with substantial potential for groundwater recharge, and promote recharge of groundwater basins throughout the watershed (excluding the river bed).

**Objective CO 4.3:** Limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, and managing stormwater runoff at the source.

**Policy CO 4.3.1:** On undeveloped sites proposed for development, promote on-site stormwater infiltration through design techniques such as pervious paving, draining runoff into bioswales or properly designed landscaped areas, preservation of natural soils and vegetation, and limiting impervious surfaces.

**Policy CO 4.3.2:** On previously developed sites proposed for major alteration, provide stormwater management improvements to restore natural infiltration, as required by the reviewing authority.

**Policy CO 4.3.3:** Provide flexibility for design standards for street width, sidewalk width, parking, and other impervious surfaces when it can be shown that such reductions will not have negative impacts and will provide the benefits of stormwater retention, groundwater infiltration, reduction of heat islands, enhancement of habitat and biodiversity, saving of significant trees or planting of new trees, or other environmental benefit.

**Policy CO 4.3.4:** Encourage and promote the use of new materials and technology for improved stormwater management, such as pervious paving, green roofs, rain gardens, and vegetated swales.

**Policy CO 4.3.5:** Where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting.

**Policy CO 4.3.6:** Discourage the use of mounded turf and lawn areas which drain onto adjacent sidewalks and parking lots, replacing these areas with landscape designs that retain runoff and allow infiltration.

**Policy CO 4.3.7:** Reduce the amount of pollutants entering the Santa Clara River and its tributaries by capturing and treating stormwater runoff at the source, to the extent possible.

**Goal CO 8:** Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.

**Objective CO 8.3:** Encourage green building and sustainable development practices on private development projects, to the extent reasonable and feasible.

**Policy CO 8.3.1:** Evaluate development proposals for consistency with the ordinances developed through the County's Green Building Program.

**Goal CO 10:** Preservation of open space to meet the community's multiple objectives for resource preservation.

**Objective CO 10.1:** Identify areas throughout the Santa Clarita Valley which should be preserved as open space in order to conserve significant resources for long-term community benefit.

**Policy CO 10.1.9:** Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other open space that provides nature carbon sequestration benefits.

**Goal S 2:** Protection of public safety and property from unreasonable risks due to flooding.

**Objective S 2.1:** Plan for flood protection as part of a multi-objective watershed management approach for the Santa Clara River and its tributaries.

**Policy S 2.1.2:** Promote Low Impact Development standards on development sites, including but not limited to minimizing impervious surface area and promoting infiltration, in order to reduce the flow and velocity of stormwater runoff throughout the watershed.

### ***Effectiveness of Proposed Area Plan Goals, Objectives, and Policies***

The above Area Plan goals, objectives, and policies promote groundwater recharge in the Planning Area. Examples of measure that can be taken to enhance groundwater recharge related policies include: promoting the use of permeable paving materials to allow infiltration of surface water into the water table (**Policy LU 7.3.1**), maintaining stormwater runoff on site by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements (**Policy LU 7.3.2**), and seeking methods to decrease impermeable site area in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate (**Policy LU 7.3.3**). Other design-related policies include: where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting (**Policy CO 4.3.5**) and discouraging the use of mounded turf and lawn areas which drain onto adjacent sidewalks and parking lots, replacing these areas with landscape designs that retain runoff and allow infiltration (**Policy CO 4.3.6**).

These policies in conjunction with oversight by the Santa Clarita Valley water purveyors for controlled pumping of groundwater in the East Subbasin and by the County outside the Subbasin would ensure that impacts relating to groundwater recharge are less than significant.

### ***Plan to Plan Analysis***

When compared with the existing City General Plan and County Area Plan, OVOV will result in a larger City population within the Planning Area and a lower County population. When compared with the existing City General Plan and County Area Plan, the density of development would be higher under OVOV, thereby covering incrementally less land area with impervious surfaces. This would allow slightly more infiltration of irrigation flow and natural rainwater. As indicated above, supplying water to the City's proposed Plan buildout would not interfere substantially with groundwater recharge, because the best available evidence shows that no adverse impacts to the recharge of the Basin have occurred due to the existing or projected use of local groundwater supplies, consistent with the CLWA/purveyor groundwater operating plan for the Basin (see **Appendix 3.13** [2005 Basin Yield Report and the 2009 Basin Yield Update]). In addition, based on the memorandum prepared by CH2MHill (Effect of Urbanization on Aquifer Recharge in the Santa Clarita Valley, February 22, 2004; **Appendix 3.13**), no significant cumulative impacts would occur to the groundwater basin with respect to aquifer recharge. This is because urbanization in the Santa Clarita Valley has been accompanied by long-term stability in pumping and groundwater levels, and the addition of imported SWP water to the valley, which together have not reduced recharge to groundwater, nor depleted the amount of groundwater in storage within the local groundwater basin. This finding is supported by the 2009 Basin Yield Update, which modeled infiltration from irrigation (from urban and agricultural lands), precipitation, and streamflows (stormwater and WRP discharges). The future operating plan for the basin has been evaluated in the 2005 UWMP, the 2005 Basin Yield Report and the 2009 Basin Yield Update, and none of the documents call for attempts to artificially recharge the basin. Based on the information presented, no significant groundwater recharge impacts would result from the existing General Plan and Area Plan buildout or OVOV buildout within the CLWA service area and East Subbasin.

Regarding the area outside the CLWA service area and the East Subbasin, the density of development under both the existing Area Plan and OVOV would be low, resulting only small amounts of land area being covered with impervious surfaces (low density development is typically accompanied by large lots



with large yard areas). As a result, in this portion of the Planning Area under OVOV, the impeding of natural runoff infiltration would be limited and similar to the current Area Plan.

## **Perchlorate Impacts on Groundwater Supply**

**Impact 3.13-3                      Result in the spreading of perchlorate in groundwater beyond the wells currently affected by perchlorate.**

### ***Within CLWA Service Area***

The detection of perchlorate in local groundwater supplies has raised concerns over the reliability of local groundwater supplies, in particular the Saugus Formation, where three wells remain removed from active service as a result of perchlorate. As discussed in both this EIR, the 2005 UWMP, Chapter 5 and Appendix D, and the 2009 Basin Yield Update, planning for remediation of the perchlorate and restoration of the impacted well capacity is substantially underway. While that work is being completed, non-impacted production facilities can be relied upon for the quantities of water projected to be available from the Alluvial aquifer and Saugus Formation during the time necessary to restore perchlorate-impacted wells. CLWA, the local retail water purveyors, DTSC, and other agencies continue to monitor and work closely on the remediation of perchlorate-impacted wells. This EIR has presented a detailed summary of the status of perchlorate remediation and restoration of perchlorate-impacted groundwater supply in the Santa Clarita Valley (see above). This work effort continues on multiple fronts to address perchlorate-impacted wells stemming from past manufacturing activities on the former Whittaker-Bermite site. As stated above, CLWA and local retail purveyors have restored, and continue work to restore, the production capacity of the groundwater supply wells contaminated by perchlorate, while working on longer-term objectives of containing the downgradient migration of perchlorate.

### **Perchlorate Impacted Water Purveyor Wells**

As discussed above, perchlorate was detected in four Saugus Formation production wells near the former Whittaker-Bermite site in 1997. As a result, these wells (SCWD's Wells, Saugus 1 and Saugus 2, NCWD's Well NC-11, and VWC's Well V-157) were removed from service. In 2002, perchlorate was detected in the SCWD Stadium Well, located in the Alluvial aquifer, directly adjacent to the former Whittaker-Bermite site. This Alluvial well also was removed from service.

Since the detection of perchlorate and resultant inactivation of impacted wells, the purveyors have been conducting regular monitoring of active wells near the Whittaker-Bermite site. In April 2005, that

monitoring detected the presence of perchlorate in Valencia Water Company's Well Q2, an Alluvial well located immediately northwest of the confluence of Bouquet Creek and the Santa Clara River.

As a result of the detection and confirmation of perchlorate in its Well Q2, Valencia Water Company removed the well from active service and pursued rapid permitting and installation of wellhead treatment in order to return the well to water supply service. In October 2005, Valencia Water Company restored the pumping capacity of Well Q2 with the startup of wellhead treatment designed to effectively remove perchlorate. After nearly two years of operation with wellhead treatment, during which there was no detection of perchlorate, Valencia was authorized by DPH to discontinue treatment. Since that time, Well Q2 has operated without treatment and there has been no detection of perchlorate since discontinuation of wellhead treatment. As a result, Well Q2 is part of the purveyors' capacity in its operating plan.

In January 2005, Valencia Water Company permanently closed well V-157 and, in September 2005, completed the construction of new Saugus well V-206 located in an area of the Saugus Formation not impacted by perchlorate. Valencia Water Company's V-206, which is operational, has replaced the pumping capacity temporarily impacted by the detection of perchlorate at former well V-157. Well V-206 is part of the purveyors' capacity in its operating plan.

In addition, in response to the deactivation of the Stadium Well, SCWD has recently drilled a replacement well (Valley Center Well) further to the east, north-northeast of the former Whittaker-Bermite site. The Valley Center Well also will be a part the Valley's active municipal groundwater source capability.

In summary, three Saugus wells (Saugus 1 and 2 and NC-11) remain off-line due to perchlorate contamination. However, as stated above, there is more than sufficient pumping capacity in the Alluvial and Saugus production wells to meet the purveyors' groundwater operating plan, without any adverse environmental effects.

Locations of the impacted wells and other nearby non-impacted wells, relative to the Whittaker-Bermite site are shown on **Figures 3.13-6 and 3.13-7**.

### **Restoration of Perchlorate Impacted Water Supply**

Since the detection of perchlorate in the four Saugus wells in 1997, CLWA and the retail water purveyors have recognized that one element of an overall remediation program would most likely include pumping from impacted wells, or from other wells in the immediate area, to establish hydraulic conditions that would control the migration of contamination from further impacting the aquifer in a downgradient

(westerly) direction. Thus, CLWA and the retail water purveyors report that the overall perchlorate remediation program includes dedicated pumping from some or all of the impacted wells, with appropriate treatment, such that two objectives could be achieved. The first objective is control of subsurface flow and protection of downgradient wells, and the second is restoration of some or all of the contaminated water supply. Not all impacted capacity is required for control of groundwater flow. The remaining capacity would be replaced by construction of replacement wells at non-impacted locations.

In cooperation with state regulatory agencies and investigators working for Whittaker-Bermite, CLWA and the local retail water purveyors developed an off-site plan that focuses on the concepts of groundwater flow control and restored pumping capacity and is compatible with on-site and possibly other off-site remediation activities. Specifically relating to water supply, the plan includes the following:

- Constructing and operating a water treatment process that removes perchlorate from two impacted wells such that the produced water can be used for municipal supply.
- Hydraulically containing the perchlorate contamination that is moving from the Whittaker-Bermite site toward the impacted wells by pumping the wells at rates that will capture water from all directions around them.
- Protecting the downgradient non-impacted wells through the same hydraulic containment that results from pumping two of the impacted wells.
- Restoring the annual volumes of water pumped from the impacted wells before they were inactivated and also restoring the wells' total capacity to produce water in a manner consistent with the retail water purveyors' operating plan for groundwater supply described above.

The two key activities that comprise the majority of effort required for implementation of the plan are general facilities-related work (design and construction of well facilities, treatment equipment, pipelines, etc.) and permitting work. Both activities are planned and scheduled concurrently, resulting in planned completion (i.e., restoration of all impacted capacity) in 2010. Notable accomplishments toward implementation include completion of the Final Interim Remedial Action Plan (RAP) and associated environmental review with the adoption of a Mitigated Negative Declaration in September 2005, and various implementation activities from 2007–2009. Completion of the CLWA containment plan is expected in summer or fall 2010.

In light of the preceding, as to the adequacy of groundwater as the local component of water supply for the Santa Clarita Valley, the impacted capacity of the three wells will remain unavailable into 2010, during which time the non-impacted groundwater supply will be sufficient to meet near-term water requirements as described above. With the restoration of the wells, the total groundwater capacity will be

sufficient to meet the full range of normal and dry-year conditions as provided in the CLWA/retail water purveyor groundwater operating plan for the Basin.

Returning the remaining three contaminated Saugus wells to municipal water supply service requires issuance of permits from DPH before the water can be considered potable and safe for delivery to customers. The permit requirements are contained in DPH Policy Memo 97-005 for direct domestic use of impaired water sources.

Before issuing a permit to a water utility for use of an impaired source as part of the utility's overall water supply permit, DPH requires that studies and engineering work be performed to demonstrate that pumping the wells and treating the water will be protective of public health for users of the water. The 97-005 Policy Memo requires that DPH review the local retail water purveyor's plan, establish appropriate permit conditions for the wells and treatment system, and provide overall approval of returning the impacted wells to service for potable use. Ultimately, the CLWA/local retail water purveyor plan and the DPH requirements are intended to ensure that the water introduced to the potable water distribution system has no detectable concentration of perchlorate.

The DPH 97-005 Policy Memo requires, among other things, the completion of a source water assessment for the impacted wells intended to be returned to service. The purpose of the assessment is to determine the extent to which the aquifer is vulnerable to continued migration of perchlorate and other contaminants of interest from the Whittaker-Bermite site. The assessment includes the following:

- Delineation of the groundwater capture zone caused by operating the impacted wells
- Identification of contaminants found in the groundwater at or near the impacted wells
- Identification of chemicals or contaminants used or generated at the Whittaker-Bermite facility
- Determination of the vulnerability of pumping the impacted wells to these contaminant sources

CLWA worked with its consultants and local retail purveyors to complete the DPH 97-005 Policy Memo permit application. The application includes, among other things, the Source Water Assessment, Raw Water Quality Characterization, Source Protection Plan, Effective Monitoring and Treatment Evaluation, Human Health Risk Assessment, and the Alternatives Sources Evaluation. The CEQA process for the "CLWA Groundwater Containment, Treatment, and Restoration Project," for which the 97-005 process was completed in September 2005.

As listed above, DPH 97-005 Policy Memo requires an analysis to demonstrate contaminant capture and protection of other nearby water supply wells. The development and calibration of a numerical

groundwater flow model of the entire basin had been initiated as a result of a 2001 MOU among the Upper Basin Water Purveyors (CLWA, CLWA SCWD, LACWWD #36, NCWD, and VWC) and the United Water Conservation District in Ventura County.

The groundwater model was initially intended for use in analyzing the operating yield and sustainability of groundwater in the Basin. However, the model was adaptable to analyze both the sustainability of groundwater under an operational scenario that includes full restoration of perchlorate-contaminated supply and the containment of perchlorate near the Whittaker-Bermite property (i.e., by pumping some of the contaminated wells). In 2004, DTSC reviewed and approved the development and calibration of the regional model. After DTSC approval, the model was used to simulate the capture and control of perchlorate by restoring impacted wells, with treatment. The results of that work are summarized in a report entitled, *Analysis of Perchlorate Containment in Groundwater Near the Whittaker-Bermite Property, Santa Clarita, California* (CH2MHill, December 2004) (see **Appendix 3.13**), and is summarized in the 2009 Basin Yield Update (**Appendix 3.13**). The modeling analysis indicates that the pumping of impacted wells SCWD-Saugus 1 and SCWD-Saugus 2 on a nearly continual basis will effectively contain perchlorate migrating westward in the Saugus Formation from the Whittaker-Bermite property. The modeling analysis also indicates that (1) no new production wells are needed in the Saugus Formation to meet the perchlorate containment objective; (2) impacted well NCWD-11 is not a required component of the containment program; and (3) pumping at SCWD-Saugus 1 and SCWD-Saugus 2 is necessary to prevent migration of perchlorate to other portions of the Saugus Formation. This report, and the accompanying modeling analysis, was approved by DTSC in November 2004. With that approval, the model is now being used to support the source water assessment and the balance of the permitting process required by DPH.

Based on the information presented, and the progress made to date identifying, containing and treating perchlorate impacted water, implementation of the 2008 Operating Plan and buildout of the OVOV Plan would not result in the spread of perchlorate in the Basin beyond the currently impacted wells. Therefore, no significant perchlorate-related impacts (including cumulative impacts) would occur with respect to this significance threshold.

### ***Outside CLWA Service Area***

Buildout of the OVOV Plan in the portion of the Planning Area outside the CLWA service area and East Subbasin would not result in the spread of perchlorate in the Basin beyond the currently impacted wells because this area does not rely on groundwater from the East Subbasin. The groundwater used in this area is from alluvium and terrace deposits found outside of the Basin where perchlorate contamination

occurs, which is several miles west of this portion of the Planning Area. Therefore, no significant perchlorate-related impacts (including cumulative impacts) would occur with respect to this significance threshold.

### ***Proposed Area Plan Goals, Objectives, and Policies***

**Goal CO.1:** A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.

**Objective CO 1.4:** Minimize the long-term impacts posed by harmful chemical and biological materials on environmental systems.

**Policy CO 1.4.1:** In cooperation with other appropriate agencies, identify pollution sources and adopt strategies to reduce emissions into air and water bodies.

**Policy CO 1.4.2:** In cooperation with other appropriate agencies, abate or remediate known areas of contamination, and limit the effects of any such areas on public health.

**Goal CO 4:** An adequate supply of clean water to meet the needs of present and future residents and businesses, balanced with the needs of natural ecosystems.

**Objective CO 4.4:** Promote measures to enhance water quality by addressing sources of water pollution.

**Policy CO 4.4.2:** Support the cooperative efforts of property owners and appropriate agencies to eliminate perchlorate contamination on the Whittaker-Bermite property and eliminate the use of any industrial chemicals or wastes in a manner that threatens groundwater quality.

**Goal S 4:** Protection of public safety and property from hazardous materials.

**Objective S 4.1:** Identify sites that are contaminated with chemicals and other hazardous materials, and promote clean-up efforts.

**Policy S 4.1.2:** Coordinate with other agencies to address contamination of soil and groundwater from hazardous materials on various sites, and require that contamination be cleaned up to the satisfaction of the County and other responsible agencies prior to issuance of any permits for new development.

### ***Effectiveness of Area Plan Goals, Objectives, and Policies***

The above goals, objectives, and policies support the ongoing clean up efforts on the Whittaker-Bermite property, thereby assisting the City's efforts to remediate the property for future use. Additionally, they protect groundwater quality by supporting the elimination of industrial chemicals or wastes in a manner than threatens groundwater quality. Examples of supportive policies include: identify pollution sources and adopt strategies to reduce emissions into air and water bodies (**Policy CO 1.4.1**), abate or remediate known areas of contamination, and limit the effects of any such areas on public health (**Policy CO 1.4.2**), support the cooperative efforts of property owners and appropriate agencies to eliminate perchlorate contamination on the Whittaker-Bermite property and eliminate the use of any industrial chemicals or wastes in a manner that threatens groundwater quality (**Policy CO 4.4.2**), and coordinate with other agencies to address contamination of soil and groundwater from hazardous materials on various sites, and require that contamination be cleaned up to the satisfaction of the County and other responsible agencies prior to issuance of any permits for new development (**Policy S 4.1.2**),

Implementation of these policies along with the ongoing clean up efforts at the Whittaker-Bermite site and in the affected groundwater would remediate the existing perchlorate contamination from the site and the spreading of perchlorate in groundwater beyond the wells currently affected by perchlorate. Based on the information presented above, impacts to water resources related to perchlorate contamination would be less than significant, and no mitigation would be required.

### ***Plan to Plan Analysis***

When compared with the existing City General Plan and County Area Plan, OVOV will result in a larger City population within the Planning Area and a lower County population. Consequently, water demands would be greater under OVOV in the City and within the CLWA service area and East Subbasin. Demands would be reduced in the County under OVOV. As is described above, an adequate supply of water would be available within the CLWA service area and East Subbasin to serve the existing City General Plan and County Area Plan population and the OVOV population. However, even though buildout population would decrease from the existing County Area Plan population of 249,524 to 237,387

under OVOV, significant impacts would still occur outside the CLWA service area and the East Subbasin due to existing constrained water supplies.

Regarding potential impacts due to groundwater contaminated by perchlorate, contamination is limited to portions of the East Subbasin near to and west of the Whittaker-Bermite site in Saugus. Locations outside the CLWA service area and the East Subbasin are not and would not be affected by perchlorate contamination because the contamination is isolated within the East Subbasin. A larger population within the CLWA service area and East Subbasin could potentially expose a larger number of people to contaminated groundwater. However, given the perchlorate containment and treatment program being enacted by the Santa Clarita Valley water purveyors, and the results indicating “non-detect” levels of perchlorate in wells under treatment, no significant perchlorate-related impacts would occur under either the current City and County Plans or OVOV.

## MITIGATION FRAMEWORK

### Within CLWA Service Area

The OVOV Area Plan includes many goals, objectives, and policies that focus on the preservation and sustainability of water resources. The analysis provided above regarding the sufficiency of water supplies, including groundwater supply and recharge and the containment and treatment of ammonium perchlorate in the local groundwater, concludes that no significant impacts would be created by buildout of the OVOV Area Plan within the service area of CLWA, including portions of the Planning Area within the East Subbasin. Therefore, no mitigation measures are required. However, the following policies (now numbered mitigation measures) shall be employed as appropriate for the condition to ensure that impacts remain less than significant:

#### *For Water Supply Demand and Groundwater Supply*

- MM 3.13-1 (Policy LU 4.5.2):** Encourage the provision of usable open space that is accessible to employees and visitors, and discourage the provision of large areas of water-consuming landscaping that are not usable or accessible.
- MM 3.13-2 (Policy LU 4.5.3):** Promote the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features.



- MM 3.13-3 (Policy LU 7.2.1):** Monitor growth, and coordinate with water districts as needed to ensure that long-range needs for potable and reclaimed water will be met.
- MM 3.13-4 (Policy LU 7.2.2):** If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, take appropriate steps to limit, reduce, or otherwise modify growth permitted by the Area Plan in consultation with water districts to ensure adequate long-term supply for existing businesses and residents.
- MM 3.13-5 (Policy LU 7.2.3):** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.
- MM 3.13-6 (Policy LU 7.4.1):** Require the use of drought tolerant landscaping, native California plant materials, and evapotranspiration (smart) irrigation systems.
- MM 3.13-7 (Policy LU 7.4.2):** Require the use of low-flow fixtures in all non-residential development and residential development with five or more dwelling units, which may include but are not limited to water conserving shower heads, toilets, waterless urinals and motion-sensor faucets, and encourage use of such fixtures in building retrofits as appropriate.
- MM 3.13-8 (Policy CO 1.1.1):** In making land use decisions, consider the complex, dynamic, and interrelated ways that natural and human systems interact, such as the interactions between energy demand, water demand, air and water quality, and waste management.
- MM 3.13-9 (Policy CO 4.1.1):** In coordination with applicable water suppliers, adopt and implement a water conservation strategy for public and private development.
- MM 3.13-10 (Policy CO 4.1.2):** Provide examples of water conservation in landscaping through use of low water use landscaping in public spaces such as parks, landscaped medians and parkways, plazas, and around public buildings.
- MM 3.13-11 (Policy CO 4.1.3):** Require low water use landscaping in new residential subdivisions and other private development projects, including a reduction in the amount of turf-grass.

- MM 3.13-12 (Policy CO 4.1.4):** Provide informational materials to applicants and contractors on the Castaic Lake Water Agency's Landscape Education Program, and/or other information on xeriscape, native California plants, and water-conserving irrigation techniques as materials become available.
- MM 3.13-13 (Policy CO 4.1.5):** Promote the use of low-flow and/or waterless plumbing fixtures and appliances in all new non-residential development and residential development of five or more dwelling units.
- MM 3.13-14 (Policy CO 4.1.6):** Support amendments to the County Building Code that would promote upgrades to water and energy efficiency when issuing permits for renovations or additions to existing buildings.
- MM 3.13-15 (Policy CO 4.1.7):** Apply water conservation policies to all pending development projects, including approved tentative subdivision maps to the extent permitted by law. Where precluded from adding requirements by vested entitlements, encourage water conservation in construction and landscape design.
- MM 3.13-16 (Policy CO 4.1.8):** Upon the availability of non-potable water services, discourage and consider restrictions on the use of potable water for washing outdoor surfaces.
- MM 3.13-17 (Policy CO 4.2.1):** In cooperation with the Sanitation District and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.
- MM 3.13-18 (Policy CO 4.2.2):** Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.
- MM 3.13-19 (Policy CO 4.2.3):** Promote the installation of rainwater capture and gray water systems in new development for irrigation, where feasible and practicable.

**MM 3.13-20 (Policy CO 4.2.5):** Participate and cooperate with other agencies to complete, adopt, and implement an Integrated Regional Water Management Plan to build a diversified portfolio of water supply, water quality, and resource stewardship priorities for the Santa Clarita Valley.

**MM 3.13-21 (Policy CO 4.2.6):** Require that all new development proposals demonstrate a sufficient and sustainable water supply prior to approval.

**MM 3.13-22 (Policy CO 8.3.3):** Promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

***For Groundwater Recharge***

**MM 3.13-23 (Policy LU 7.3.1):** Promote the use of permeable paving materials to allow infiltration of surface water into the water table.

**MM 3.13-24 (Policy LU 7.3.2):** Maintain stormwater runoff on site by directing drainage into rain gardens, natural landscaped swales, rain barrels, permeable areas, and use of drainage areas as design elements, where feasible and reasonable.

**MM 3.13-25 (Policy LU 7.3.3):** Seek methods to decrease impermeable site area where reasonable and feasible, in order to reduce stormwater runoff and increase groundwater infiltration, including use of shared parking and other means as appropriate.

**MM 3.13-26 (Policy CO 2.3.5):** Promote remediation and restoration of mined land to a condition that supports beneficial uses, which may include but are not limited to recreational open space, habitat enhancement, groundwater recharge, or urban development.

**MM 3.13-27 (Policy CO 3.6.2):** Reduce impervious surfaces and provide more natural vegetation to enhance microclimates and provide habitat. In implementing this policy, consider the following design concepts:

- b. Increased use of vegetated areas around parking lot perimeters; such areas should be designed as bioswales or as otherwise determined appropriate to allow surface water infiltration;

- c. Use of connected open space areas as drainage infiltration areas in lieu of curbed landscape islands, minimizing the separation of natural and landscaped areas into isolated “islands”;

**MM 3.13-28 (Policy CO 4.2.4):** Identify and protect areas with substantial potential for groundwater recharge, and promote recharge of groundwater basins throughout the watershed (excluding the river bed).

**MM 3.13-29 (Policy CO 4.3.1):** On undeveloped sites proposed for development, promote on site stormwater infiltration through design techniques such as pervious paving, draining runoff into bioswales or properly designed landscaped areas, preservation of natural soils and vegetation, and limiting impervious surfaces.

**MM 3.13-30 (Policy CO 4.3.2):** On previously developed sites proposed for major alteration, provide stormwater management improvements to restore natural infiltration, as required by the reviewing authority.

**MM 3.13-31 (Policy CO 4.3.3):** Provide flexibility for design standards for street width, sidewalk width, parking, and other impervious surfaces when it can be shown that such reductions will not have negative impacts and will provide the benefits of stormwater retention, groundwater infiltration, reduction of heat islands, enhancement of habitat and biodiversity, saving of significant trees or planting of new trees, or other environmental benefit.

**MM 3.13-32 (Policy CO 4.3.4):** Encourage and promote the use of new materials and technology for improved stormwater management, such as pervious paving, green roofs, rain gardens, and vegetated swales.

**MM 3.13-33 (Policy CO 4.3.5):** Where detention and retention basins or ponds are required, seek methods to integrate these areas into the landscaping design of the site as amenity areas, such as a network of small ephemeral swales treated with attractive planting.

**MM 3.13-34 (Policy CO 4.3.6):** Discourage the use of mounded turf and lawn areas which drain onto adjacent sidewalks and parking lots, replacing these areas with landscape designs that retain runoff and allow infiltration.

**MM 3.13-35 (Policy CO 4.3.7):** Reduce the amount of pollutants entering the Santa Clara River and its tributaries by capturing and treating stormwater runoff at the source, to the extent possible.

**MM 3.13-36 (Policy CO 8.3.1):** Evaluate development proposals for consistency with the ordinances developed through the County's Green Building Program.

**MM 3.13-37 (Policy CO 10.1.9):** Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas, and other open space that provides nature carbon sequestration benefits.

**MM 3.13-38 (Policy S 2.1.2):** Promote Low Impact Development standards on development sites, including but not limited to minimizing impervious surface area and promoting infiltration, in order to reduce the flow and velocity of stormwater runoff throughout the watershed.

***For Perchlorate Impacts on Groundwater Supply***

**MM 3.13-39 (Policy CO 1.4.1):** In cooperation with other appropriate agencies, identify pollution sources and adopt strategies to reduce emissions into air and water bodies.

**MM 3.13-40 (Policy CO 1.4.2):** In cooperation with other appropriate agencies, abate or remediate known areas of contamination, and limit the effects of any such areas on public health.

**MM 3.13-41 (Policy CO 4.4.2):** Support the cooperative efforts of property owners and appropriate agencies to eliminate perchlorate contamination on the Whittaker-Bermite property and eliminate the use of any industrial chemicals or wastes in a manner that threatens groundwater quality.

**MM 3.13-42 (Policy S 4.1.2):** Coordinate with other agencies to address contamination of soil and groundwater from hazardous materials on various sites, and require that contamination be cleaned up to the satisfaction of the City and other responsible agencies prior to issuance of any permits for new development.

## Outside CLWA Service Area

As indicated in this analysis and based on the available information, significant water supply impacts would result from OVOV Area Plan buildout in portions of the Planning Area outside of CLWA's service area boundary. For areas outside of the East Subbasin, locations that are without access to imported SWP and non-SWP imported water, recycled water, or groundwater from the East Subbasin, groundwater resources are currently strained as private wells are, in some instances, running dry. This condition is resulting in water being trucked to private water tanks in order to provide necessary potable water to affected residents. Without mitigation, this condition would become exacerbated if an increase in lots occurs through Area Plan implementation. Consistent with the goals, objectives and policies presented in OVOV and *in addition to* mitigation measures **MM 3.13-1 to 3.13-42** as appropriate for the condition and circumstance, the following performance standards shall also be implemented on a project-by-project basis in order to reduce impacts to less than significant levels, and to ensure that future residents and businesses of the area have access to sufficient and sustainable water sources. However, despite implementation of the performance standards provided in this subsection, impacts to water resources in this area would remain significant.

3.13-43: Small Project (1 to 4 Dwelling Units), including Parcel Maps

### Required Evidence

#### A. Piped Water:

1. Will-serve letter from purveyor.

#### B. Well Water, On-Site (BOTH required):

1. Well Capacity Test, in accordance with the requirements of the County Department of Public Health
2. Water Quality Test, in accordance with the requirements of the County Department of Public Health

#### C. Well Water, Shared (ALL 3 required):

1. Copy of valid Shared Water Well approval
2. Well Capacity Test (as above)
3. Water Quality Test (as above)

3.13-44: Multi-Unit Project (5 Dwelling Units or more), including Tract Maps

Required Evidence

A. Piped Water (BOTH required):

1. Will-serve letter from purveyor
2. Water Supply Assessment following SB610 requirements, where required by State law

B. Well, On-Site (BOTH required):

1. Well Capacity Test, in accordance with the requirements of the County Department of Public Health
2. Water Quality Test, in accordance with the requirements of the County Department of Public Health

C. Well, Shared (ALL 3 required):

1. Copy of valid Shared Water Well approval
2. Well Capacity Test (as above)
3. Water Quality Test (as above)

3.13-45: Commercial/Industrial/Institutional Project (less than 3,000 square feet of floor area)

Required Evidence

A. Piped Water:

1. Will-serve letter from purveyor

B. Well Water, On-Site (BOTH required):

1. Well Capacity Test, in accordance with the requirements of the County Department of Public Health
2. Water Quality Test, in accordance with the requirements of the County Department of Public Health

C. Well Water, Shared (ALL 3 required):

1. Copy of valid Shared Water Well approval
2. Well Capacity Test (as above)
3. Water Quality Test (as above)

3.13-46: Commercial/Industrial/Institutional Project (3,000 square feet of floor area or more)

Required Evidence

A. Piped Water (BOTH required):

1. Will-serve letter from purveyor
2. Water Supply Assessment following SB610 requirements, where required by State law

B. Well, On-Site (BOTH required):

1. Well Capacity Test, in accordance with the requirements of the County Department of Public Health
2. Water Quality Test, in accordance with the requirements of the County Department of Public Health

C. Well, Shared (ALL 3 required):

1. Copy of valid Shared Water Well approval
2. Well Capacity Test (as above)
3. Water Quality Test (as above)

## **SIGNIFICANCE OF IMPACT WITH MITIGATION FRAMEWORK**

### **Within CLWA Service Area and East Subbasin**

Impacts on water resources within the CLWA service area and East Subbasin, including impacts associated with the adequacy of water supplies, groundwater recharge, and perchlorate contamination would be less than significant and no additional mitigation measures are required.

### **Outside CLWA Service Area and East Subbasin**

Impacts associated with the adequacy of water supplies outside the CLWA service area and East Subbasin would be unavoidably significant after the implementation of mitigation measures. Impacts associated with groundwater recharge and perchlorate contamination would be less than significant and no additional mitigation measures are required.



### EXECUTIVE SUMMARY

Community services include seniors and youth services, cultural amenities (offers a variety of events and activities for all ages), and homeless and emergency shelter services. The rest of the population would be served by Cultural Amenities, which are described below. Implementation of the proposed Area Plan will permit development that could potentially impact community services. This section examines the effects of the build out of the proposed Area Plan on community services in the County's Planning Area. The County's Planning Area consists of unincorporated land outside of the City's boundaries and adopted Sphere of Influence (SOI) but within the One Valley One Vision (OVOV) Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Both the City and County Planning Areas comprise the OVOV Planning Area.

### Seniors and Youth

The impacts analysis section on senior and youth services includes an analysis of the number of existing affordable senior housing units found within the County's Planning Area (150 units). The 2008 senior population (age 65 and over) consisted of 7,800 residents, or 10.4 percent of the 2008 population.<sup>1</sup> As the population of the County's Planning Area reaches buildout, the number of senior citizens would be expected to increase as the existing population ages.

The impact analysis section also describes the amount of childcare facilities and youth programs. The 2007 youth (ages 18 and younger) population was 22,058. The County would need to work with childcare facilities and providers to provide adequate services as the County's Planning Area reaches buildout. Greater utilization of park resources would need to meet the future demands of youth programs and youth sports. Impacts on senior and youth services were found to be less than significant with the implementation of the Area Plan policies.

### Cultural Amenities

This cultural amenities subsection describes the various social, cultural, and arts resources available within the County's Planning Area. Cultural amenities in the County's Planning Area include theatres, auditoriums, and recreational facilities. Cultural organizations range from arts organizations to faith-

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<sup>1</sup> 2008 population derived from the City of Santa Clarita General Plan, Draft Land Use Element, 2009. The percentage of the population is derived from the US Census Bureau Los Angeles County information.

based organizations. Cultural programs include arts programs run by the County's Department of Parks and Recreation, the County's Department of Community and Senior Services, and those sponsored by private organizations. As the buildout of the County's Planning Area increases, the demand on different cultural amenities will increase. This increase will require more meeting space to accommodate the increase in population. Impacts on cultural amenities would be less than significant with implementation of the proposed Area Plan policies.

### **Homeless and Emergency Shelter Services**

This section describes the homeless and emergency shelter services and programs provided within the County's Planning Area. It includes data from two recent reports on homelessness in the Santa Clarita Valley. The discussion in the section pertains to homelessness in the County's Planning Area based on data obtained from the County of Los Angeles and the City of Santa Clarita. The OVOV Planning Area offers a temporary homeless shelter during the winter months from December 1 to March 15 of each year. The County Zoning Ordinance allows homeless shelters in certain zones with a Director's Review or Conditional Use Permit. Impacts would be less than significant with implementation of the proposed Area Plan policies.

## **SENIORS AND YOUTH**

### **Summary**

The senior and youth subsection describes the services oriented to the needs of the youth and the senior populations in the County's Planning Area, such as children, senior citizens, and disabled persons. The Santa Clarita Committee on Aging, a charitable non-profit 501(c)3 organization that does business as the "Santa Clarita Valley Senior Center," serves over 35,000 seniors.<sup>2</sup> The Senior Center is the only comprehensive service provider in the OVOV Planning Area, and is responsible for all senior programming. A wide variety of childcare and teen programs are available throughout the Santa Clarita Valley. Over the last decade, the OVOV Planning Area has developed into a major hub for youth sports and activities.

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<sup>2</sup> City of Santa Clarita, "Our Mission," <http://scvsc.org/about.php>, 2009.

## Existing Conditions

The number of senior residents within the County's Planning Area in 2008 totaled 7,800; there were 22,058 residents that were ages 18 and under.<sup>3</sup> The senior and youth populations for the County's Planning Area are based on the available data for Los Angeles County obtained from the US Census Bureau. Available senior housing consists of 150 units within the County's Planning Area and a total of 957 affordable units within the OVOV Planning Area.<sup>4</sup> There is one senior center serving a third of the senior population. The County's Planning Area 2008 population was 75,000. As such, persons age 18 and under comprised about 26.1 percent of the total population,<sup>5</sup> or approximately 19,575 people, and persons age 65 and older comprised about 10.4 percent of the population,<sup>6</sup> or approximately 7,800 people. Together, the large number and unique needs of residents in these age groups suggests the need for specialized services. If current trends continue, and as the adult population ages, there will likely be an increase in the youth and senior populations as well as the demand for services for those age groups.

### *Seniors*

Numbering approximately 7,800 people, seniors, those age 65 or older, comprise 10.4 percent of the County's population and have the greatest need for specialized resources, such as transportation, medical, and assisted living.

### **Service Providers**

The Santa Clarita Committee on Aging, a charitable non-profit 501(c)3 organization that does business as the "Santa Clarita Valley Senior Center" (Senior Center), serves over 35,000 seniors. The Senior Center is the only comprehensive service provider in the OVOV Planning Area, and is responsible for all senior programming. The Senior Center hosts most of their programs, nutritional, supportive, and handyworker services, exercise programs, and arts and crafts classes on site at 22900 Market Street in Newhall. While there are few facilities especially designed for senior activities, the County strives to accommodate the needs of seniors through programs and services provided by the County libraries located within the OVOV Planning Area, and all City facilities are open and accessible to seniors. Transportation to activities throughout the Valley is provided by both Dial-a-Ride and by the Senior Center.

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<sup>3</sup> US Census Bureau, "State and County Quick Facts," <http://quickfacts.census.gov/qfd/states/06/06037.html>, 2009.

<sup>4</sup> City of Santa Clarita, "Affordable Housing and Services," <http://www.santa-clarita.com/cityhall/cd/housing/housing5.asp>, 2009

<sup>5</sup> City of Santa Clarita, "Affordable Housing and Services."

<sup>6</sup> City of Santa Clarita, "Affordable Housing and Services."

There are a few additional organizations in the Valley that also serve the senior population. The Santa Clarita Adult Day Health Care provides caregiver support to Alzheimer patients, as well as recreation and social activities for those in poor health. The Santa Clarita Valley Food Pantry, with which the Senior Center works, provides nutrition for low-income seniors. This is done through three services:

- congregate meals, which are hot, nutritionally balanced meals for all senior citizens;
- home delivered meals (HDM) program which is designed to serve those seniors and others who by virtue of frailty or other chronic health conditions, cannot meet their own nutritional needs. The HDM program delivers hot, nutritional meals to participants' homes between the hours of 11:00 AM and 1:00 PM Monday through Friday; and
- the effective nutritional health assessments and networks of care for the elderly (ENHANCE) program which provides for a licensed nutritionist to provide in-home nutritional evaluation for those who are at high risk and have specific nutritional needs that must be addressed.

The single most important issue facing this population is the lack of nursing care/assisted living facilities in the County's Planning Area. There is currently only one nursing home in the OVOV Planning Area, Santa Clarita Convalescent Home, run by a for profit corporation,<sup>7</sup> and as the adult population continues to age, more facilities will be needed.<sup>8</sup> The Santa Clarita Convalescent Home is located in the City's Planning Area. There are currently three private assisted living facilities within the City's Planning Area; Sunrise At Sterling Canyon; Capri-Retirement Villa; and Summerhill Villa.

In order to better serve the senior population, the Senior Center has developed affordable senior housing facilities throughout the Santa Clarita Valley, which include:

- Castaic Lake Senior Village
- Bouquet Canyon Seniors
- Canterbury Village Senior Apartments
- Canyon Country Senior Apartments
- Fountain Glen Apartments

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<sup>7</sup> US Government Medicare, "US Government Site for People with Medicare, Nursing Home Compare" <http://www.medicare.gov/NHCompare/Include/DataSection/Questions/HomeSelect.asp>, 2009.

<sup>8</sup> City of Santa Clarita, Economic Development, "Age Demographics," [http://www.santa-clarita.com/cityhall/cd/ed/community\\_profile/2007demographics/population.asp#age](http://www.santa-clarita.com/cityhall/cd/ed/community_profile/2007demographics/population.asp#age). 2008.

- Orchard Arms
- Valencia Villas
- Whispering Oaks Apartments

The Castaic Lake Senior Village contains 150 units within the County's Planning Area and has facilitated access to the Center's recreational facilities and services. These facilities make up a total of 957 affordable units.

### **Programs**

The Senior Center offers a wide range of services, programs, and classes. Programs range from home delivered meals for homebound seniors, to counseling programs, transportation, and the development of affordable housing facilities in Northern Los Angeles County. The Senior Center also provides a range of recreational and educational opportunities, including excursions, dance classes, computer training, arts and crafts, and fitness. In addition, there are supportive service programs that allow seniors to maintain independence for as long as possible, with programs that provide nutritional evaluation, in-home functional assistance for the disabled, and support for the visually impaired.

The Senior Center participated in the first-ever Los Angeles County Strategic Plan for Long Term Care for the Aged and Disabled, an all-encompassing plan completed with the input of 100 service providers, including 18 County departments that provide long-term care. The Board of Supervisors approved the Strategic Long-Term Care Plan on January 21, 2003.

### **Disabled Senior Adults**

Disabled senior citizens within the County's Planning Area have access to various services offered by both national and local organizations. Programs are offered by numerous groups such as: American Association of Retired Persons; Alzheimer's National Association; a Retirement Living Referral Agency; the Senior Center's Community Meal Site for Seniors; the County's Elder Abuse Hotline; Elder Care Locator; Los Angeles County Health Services/Nursing Home; UCLA Geriatric Psychiatry Services; Medic Alert Foundation; Santa Clarita Adult Day Health Care Center; Santa Clarita Food Pantry; and Santa Clarita Valley Senior Center.

## Youth

In 2008, approximately 22,058 residents of the County's Planning Area were youth 18 years of age or younger, and comprised approximately 26.9 percent of the County's Planning Area population. A wide variety of childcare and teen programs are available throughout the Santa Clarita Valley. Programs include preschool, cooperative, full-day care, school-age childcare, year-round care, infant (six weeks to two years) care, parent-toddler programs, kindergarten, youth intervention, after school programs, sports, and special education.

### Service Providers

Childcare support services in the OVOV Planning Area include the Child Care Resource Center (CCRC), the Family Day Care Association of the Santa Clarita Valley, and the Santa Clarita Child and Family Center, formerly known as the Santa Clarita Child and Family Programs.<sup>9</sup> The CCRC, which is based in Northridge, provides a referral service for special education and day care for the Santa Clarita Valley. The CCRC, which receives public funding, works with County and City agencies to administer CalWorks, a program that provides temporary financial assistance and employment focused services to families with minor children who have income and property below state maximum limits for their family size.

### Childcare

There are six licensed childcare centers in the County's Planning Area and they are licensed through the childcare licensing division of the State Department of Social Services. The total licensed capacity for the 6 licensed facilities is 318.<sup>10</sup> The OVOV Planning Area includes 75 licensed facilities for a total capacity of 5,458. Although these providers serve multiple age groups from infant through 12 years old, they are limited to serving a maximum of three infants between the ages of six weeks and two years. Therefore, most requests for childcare referrals in the County's Planning Area are for infants. As is the case Countywide, infants are the most underserved population in the Valley.

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<sup>9</sup> City of Santa Clarita, Department of Parks, Recreation, and Community Services, 2000

<sup>10</sup> California Community Care Licensing Division, [http://www.cclcd.ca.gov/docs/cclcd\\_search/cclcd\\_search.aspx](http://www.cclcd.ca.gov/docs/cclcd_search/cclcd_search.aspx), 2008. For child care facilities, however, it will only search for state licensed Large Family Child Care Homes and Child Care Centers. It will not search for Small Family Child Care Homes or county licensed Family Child Care Homes.

### *Funding*

While the CCRC does not operate direct service programs, it subsidizes payment to family childcare providers and community childcare centers for eligible families in the County's Planning Area.<sup>11</sup> In addition, the Child and Family Center, a private, nonprofit organization, has a state-subsidized, full-day program that serves preschool-age children.

### **Programs**

#### *Disabled Youth*

There are programs offered in and around the County's Planning Area for disabled youth. Local organizations that benefit disabled youth include Carousel Ranch and Heads-up Therapy with Horses, which both offer equestrian therapy; Santa Clarita Valley Special Olympics; the Assistance League of Santa Clarita; and the Los Angeles County Department of Children and Family Services.<sup>12</sup> The Los Angeles County Workforce Investment Board (WIB), is comprised of representatives from private sector businesses, organized labor, community-based organizations, local government agencies, and local education agencies. Youth Council's mission is "to establish a comprehensive youth development system serving as a gateway of opportunities for youth to acquire the necessary life skills, education, work exposure and experiences that will enable them to have productive careers and become responsible adults."<sup>13</sup>

Some of the diverse organizations that provide youth programs are the Boy and Girl Scouts of Santa Clarita Valley, the Betty Ferguson Foundation, the California Youth Chess League, Canyon Theatre Guild, Hart District Regional Occupational Program, Santa Clarita Valley YMCA, Santa Clarita Repertory Theatre, Santa Clarita Valley School and Business Alliance, and Santa Clarita Valley Youth Orchestra.<sup>14</sup> The programs vary from music education to sports, and from job training to acting lessons. Many are open to the public at minimal or no cost.

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<sup>11</sup> Child Care Resource Center, "Help paying for child care," <http://www.ccrcla.org/home/index.asp?page=142>, 2008.

<sup>12</sup> Child Care Resource Center, "Help paying for child care."

<sup>13</sup> Los Angeles County, Workforce Investment Board Youth Council, 2008.

<sup>14</sup> City of Santa Clarita, "Arts organizations directory," <http://www.santa-clarita.com/arts/artsservices/organizations/index.asp>, 2008.

### *Young Adults*

Within the County's Planning Area, there are a variety of community service programs designed for the specific needs of pre-teens, teenagers, their parents, and families. These programs include parent and teen support groups, parent education, youth and family character building, family violence prevention education, gang prevention education, youth intervention, drug education, graffiti abatement, after school programs, and sports activities.

The Los Angeles County Workforce Investment Act (WIA) Youth Program provides increased flexibility for state and local officials to establish broad-based labor market systems using federal job training funds for adults, dislocated workers, and youth. The law mandates coordination among a range of federal job training programs, including the Employment Service, adult education and literacy programs, welfare-to-work, vocational education and vocational rehabilitation. WIA's goal is to provide workforce development services to employers and workers through a universally accessible, information-driven, one-stop career center system. The Youth Program emphasizes the long-term development of high-priority youth—low-income young people ages 14 to 21 who are either foster/emancipated, pregnant/parenting, ex-offender, disabled, deficient in basic skills, a school dropout, homeless, run away, or have other barriers to employment—by helping them connect successfully to the labor market via a network of service providers made up of local educators, businesses and other youth organizations.<sup>15</sup> The Youth Program focuses on offering eligible participants access to 10 basic elements:

- Tutoring and study skills
- Alternate secondary school services
- Summer employment
- Paid and unpaid experience
- Occupational skills training
- Support services
- Guidance counseling
- Leadership development
- Adult mentoring
- Twelve-month post-program follow-up

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<sup>15</sup> County of Los Angeles, Community and Senior Services, <http://css.lacounty.gov/Wia/Youth.html#pagetop>, 2008.



In addition, youth employment has become a major focus of programs for young adults. Pre-employment training and employment services for youth are offered through the County, City, and through nonprofits. There are an increasing number of programs offered to young adults with an emphasis on creating future job opportunities. These programs include Hart District Regional Occupational Program, Santa Clarita Valley School and Business Alliance, and Santa Clarita Scholarship Foundation. The ACTION (which runs parent and teen support groups to resolve conflicts), and the Santa Clarita Valley Youth Project all provide job-training programs as well.<sup>16</sup>

The Santa Clarita Valley Youth Project is a nonprofit organization that works with high-risk and runaway youth. The organization aims to decrease the involvement of youth in high-risk activities, and to provide them access to reliable, objective information. Through a combination of on-site services, a comprehensive website and community outreach, the Santa Clarita Youth Project provides workshops and resources on topics including alcohol and substance abuse, sex and love, depression, suicide, parenting skills, and health and wellness.

Over the last decade, the OVOV Planning Area has developed into a major hub for youth sports and activities. In 2006, more than 569,571 participants ranging from ages five and under to adult played on City sponsored recreation classes or events. The highest participation level is in programs for youth (grades K–5) and teens (grades 6–12), especially in youth sports and aquatics. There is also a high level of participation in child development programs for children under five years old.<sup>17</sup> In summary, the City of Santa Clarita provides the majority of recreational opportunities for the OVOV Planning Area.

Though facilitated by the City's Department of Parks, Recreation, and Community Services, programs are available to all residents of the County's Planning Area. Program types include basketball, flag football, tee ball, softball, volleyball, and aquatics. Children between the ages of four and eight years old enter instructional clinic-style leagues that introduce the fundamentals of the sport and place emphasis on skill development.

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<sup>16</sup> City of Santa Clarita, "City of Santa Clarita Anti-Gang Task Force," <http://www.santa-clarita.com/cityhall/parks/gang.asp>, 2008.

<sup>17</sup> City of Santa Clarita, *Santa Clarita Parks, Recreation & Open Space Master Plan*, Section 4: Recreation Programs, 2008.

## Regulatory Context

### *Federal Regulations*

#### **Workforce Investment Act<sup>18</sup>**

This federal regulation establishes a local youth council, youth programs and youth services. The youth council provides expertise in youth policy and assists the Local Board in the development of youth employment and training.

### *State Regulations*

#### **Mello-Granlund Older Californians Act**

California Welfare and Institutions Code,<sup>19</sup> the Older Californians Act establishes, for the California Department of Aging, volunteer opportunities, programs, funds, and partnerships with health service providers for the elderly.

#### **California Health and Safety Code**

Section 115725 requires that a safety inspection program be conducted on all playgrounds by a National Playground Safety Institute Certified Playground Safety Inspector. Section 115730 of the Code also requires that agencies upgrade playgrounds by replacement or improvement to meet current regulations. County staff reviews equipment for safety as part of normal maintenance operations.

#### **The California Children's Outdoor Bill of Rights**

The Children's Outdoor Bill of Rights,<sup>20</sup> offered by the California Roundtable on Recreation, Parks, and Tourism, lists fundamental experiences every child would benefit from experiencing before entering high school. The recommendations address recent concerns about youth detachment from outdoor activities, lack of physical exercise, and increased health risks. The State of California and the County of Los Angeles Parks and Recreation and the City of Santa Clarita are among the agencies and organizations that have endorsed or adopted the document where every child should have the opportunity to:

- Discover California's Past

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<sup>18</sup> Code of Federal Regulations. Title 20 Section 664. "Youth Activities."

<sup>19</sup> California Code of Regulations. Section 9000 et. seq. "Older Californians Act."

<sup>20</sup> California State Parks. "Children's Outdoor Bill of Rights." [http://www.parks.ca.gov/?page\\_id=24952](http://www.parks.ca.gov/?page_id=24952). 2008

- Splash in the water
- Play in a safe place
- Camp under the stars
- Explore nature
- Learn to swim
- Play on a team
- Follow a trail
- Catch a fish
- Celebrate their heritage

In the County's Planning Area or in close proximity, there are many opportunities to experience the activities on the list and the County continues to explore new options for furthering its commitment. In particular, the Pico No. 4 Oil Well site, Bower's Cave, and the Walker Canyon could become more effective historic resources and interpretive opportunities in the future.

### ***Local Regulations***

#### **County of Los Angeles WIA Local Plan**

In accordance with state and federal requirements under the WIA of 1998, the Los Angeles County Workforce Investment Board (LACWIB) submitted its initial Five-Year Strategic Local Plan to the state in 2000. Information contained within the LACWIB's 2008–2009 WIA Local Plan Modification reflects key areas of planning and operations for which changes have occurred since the initial modification was approved in 2005. The Plan includes a number of changes derived from requirements in Senate Bill 293, which include strategies to deliver services to businesses and job seekers in accordance with LACWIB priorities. The Plan includes descriptions of projects aimed at identifying and targeting growth industry clusters within the County's local workforce investment area, a business outreach and job development initiative, and information regarding recent and planned procurement processes to select service providers for the WIA Adult, Dislocated Worker, Youth and Rapid Response programs.<sup>21</sup>

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<sup>21</sup> County of Los Angeles, *Workforce Investment Act Local Plan Modification*, 2008.

## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *California Environmental Quality Act (CEQA) Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- There will be a significant impact to the current senior assisted living housing and the need for medical services,
- There will also be a significant impact to the availability of future childcare programs and programs for the youth.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on senior and youth services within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.14-1                      There will be a potentially significant impact to the current senior assisted living housing and the need for medical services.**

There are currently 150 units of affordable senior housing within the County's Planning Area and a total of 957 units of affordable senior housing within the OVOV Planning Area. In 2008 the number of senior residents totaled 7,800, or 10.4 percent of the population in the County's Planning Area. The existing ratio of senior housing units to the current population of seniors is 1 for every 52 seniors for the County's Planning Area and 1 for every 9 seniors for the OVOV Planning Area. The County does not currently have a housing ratio, so the actual threshold or goal for the amount of affordable housing cannot be determined. With an expected increase in the senior population in the County's Planning Area as the existing population ages, an increase in the amount of affordable senior housing will be necessary. The potential for an increase in medical needs for senior citizens is also addressed in **Section 3.15, Public Services**, of this environmental impact report (EIR). The proposed Area Plan policies would require senior housing to meet the needs of the County's Planning Area. The Land Use Map designates the appropriate zones to allow for a mix of housing opportunities for all segments of the population (**Policy LU 3.1.1**). The growth of the County's Planning Area would also increase the potential need for extra development of housing suitable to residents with special needs (**Policy LU 3.1.6**). The buildout of the County's Planning Area would be coordinated with local agencies to provide adequate housing and

facilities for the potential growth in the senior population (**Policy LU 8.1.10**). Please refer to the **Population and Housing** section of this EIR for a review of housing programs.

### ***Proposed Area Plan Policies***

- Policy LU 3.1.1:** On the Land Use Map, designate adequate land for residential use at various densities to provide a mix of housing opportunities for all segments of the population, including attached, detached, senior, and mixed use housing types, which are consistent with community character and meet the region's housing goals.
- Policy LU 3.1.6:** Promote development of housing suitable to residents with special needs, including but not limited to senior citizens and persons with disabilities.
- Policy LU 8.1.10:** Coordinate with agencies that provide services to seniors and the elderly to expand senior facilities, which may include a new senior center.

### ***Effectiveness of Proposed Area Plan Policies***

The implementation of the proposed Area Plan policies would provide the County the opportunity to adequately designate areas for senior housing and facilities. The location of the senior housing and facilities should also consider accessibility of public transit. Implementation of the proposed Area Plan policies would reduce the potential adverse impacts on senior housing and/or activities to less than significant.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans contain policies intended to minimize impacts to seniors and medical facilities. Impacts would be similar under both Plans.

**Impact 3.14-2                    There will be a potentially significant impact to the availability of future childcare programs and programs for the youth.**

As the population increases with the buildout of the County's Area Plan, demands on childcare programs and programs for youth will increase. Presently, the most requests for childcare referrals in the County's Planning Area are for infants; infants are the most underserved population in the Valley. The proposed Area Plan includes equitable and convenient access to social, cultural, educational, civic, medical, and recreational facilities and opportunities for all residents. As the population of the County's Planning Area

increases, the County will need to work with its service providers to plan for adequate community facilities and services to meet the needs of present and future residents, including those programs and services for childcare (**Policy 8.1.10**).

To be able to meet the increasing demand for youth programs and youth sports, the County will need to increase the parks and/or facilities available for the growing youth population. The services in highest demand and the most impacted are youth programs and teen programs. These increases will place an even greater priority on the convenient and accessible need for recreation close to home. The accessibility of these programs becomes linked with the amount of space available to be able to implement them. The current existing amount of parkland, within the County's Planning Area, is currently already overused. As noted in **Section 3.16, Parks and Recreation** of this EIR, the Quimby Act:

*The dedication of land, or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide three acres of park area per 1,000 persons residing within a subdivision, unless the amount of existing neighborhood and community park area, exceeds that limit, in which case the legislative body may adopt the calculated amount as a higher standard not to exceed five acres per 1,000 persons residing within a subdivision.*

This means a county or city must have 3 acres of park space per 1,000 residents.<sup>22</sup> In 2008, there were about 22,058 residents, age group 18 and younger, throughout the County's Planning Area. With the current demand of available park space already in a deficit, there would need to be greater utilization of resources to meet the future demands for youth programs and youth sports (**Policy LU 8.1.3**). Other programs, like youth job and skills training, will also be essential to equip youth with the skills necessary to command jobs and to provide for more youth services.

### ***Proposed Area Plan Policies***

**Policy LU 8.1.3:** Implement a master plan for parks, with special focus on provision of additional playfields for youth sports in locations accessible to underserved neighborhoods.

### ***Effectiveness of Proposed Area Plan Policies***

The implementation of the proposed Area Plan policies would provide the opportunity for youths to be able to participate in activities outside of school.

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<sup>22</sup> California Government Code, Section 66477.

## **Plan to Plan Analysis**

Impacts on youth and senior services under the current Area Plan would be greater due to the higher demand of services from the larger buildout population projection than under the proposed Area Plan.

## **Mitigation Framework**

No mitigation measures are required.

## **Significance of Impact with Mitigation Framework**

Implementation of the proposed Area Plan policies would reduce the potential adverse impacts on seniors and youth programs, facilities, and services to less than significant.

## **CULTURAL AMENITIES**

### **Summary**

This cultural amenities subsection describes the various social, cultural, and arts resources available within the County's Planning Area. Cultural amenities in the OVOV Planning Area include theatres, auditoriums, and recreational facilities. Cultural organizations range from arts organizations, to faith-based organizations. Cultural programs include arts programs run by the County's Arts Commission as well as those sponsored by private organizations.

### **Existing Conditions**

The OVOV Planning Area offers a variety of social and cultural facilities and opportunities for all sectors of the population. There are also numerous community-based organizations and clubs providing cultural opportunities in addition to those offered through educational affiliations such as the public and private schools in the County's Planning Area. Public libraries, movie theaters, recreational facilities (as described in **Section 3.16, Parks and Recreation**), and places of religious worship offer additional cultural and arts-related opportunities.

Santa Clarita Valley's nonprofit arts community includes a broad array of organizations and artists, and a substantial number of arts programs and activities. There is a diverse range of artistic disciplines and a strong focus on programs for children and youth. In recent years, the City of Santa Clarita has become the largest provider of arts programs in the OVOV Planning Area, as measured in terms of program

diversity, budget, audience, and staff. As a whole, the community's institutional development and infrastructure support for arts programming is at an early stage of advancement.

### ***Performing and Visual Arts Facilities***

The primary cultural arts facilities are located at California Institute of the Arts (CalArts), Valencia High School, College of the Canyons, Canyon Theatre Guild, Repertory East Playhouse in Newhall, and at temporary stages located in the County's parks. Most of these facilities are located within the City of Santa Clarita. The facilities at CalArts are almost entirely utilized by campus activities at several area high schools. Canyon Theatre Guild uses its own small theatre space virtually year round, and the County's Planning Area temporary stages are erected only for its own programs. There is also a lack of exhibition space for visual artists.

The William S. Hart High School Auditorium, located in Newhall, served as the community's primary performing arts venue until earthquake damage forced its closing in 1994. However, the Hart Performing Arts Theatre was since reconstructed and has been fully operational since 1998.

In addition to the regular collection, the OVOV Planning Area libraries preserve local and regional history. There are three County libraries located within the City's Planning Area (Canyon Country, Newhall, and Valenica), one County library located within the County's Planning Area (Castaic), and a bookmobile that serves the OVOV Planning Area. The collection covers all periods of time and includes photographs, rare books, newspapers, artifacts, and other items that are available for public review. See **Section 3.15, Public Services**, for more information on the libraries in the OVOV Planning Area.

### ***Community-Based Organizations and Programs***

The following organizations are available to artists and/or arts organizations located within the County's Planning Area that may be looking for additional technical resources:<sup>23</sup>

- The Actors' Fund of America
- Alliance for California Traditional Arts
- Artists Meeting Place and Resource Collective
- Arts for LA

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<sup>23</sup> The technical resources are meant to indicate resources outside of the OVOV Planning Area that are available to artists or groups located within the County Planning Area.



- California Association of Museums
- California Arts Advocates
- California Lawyers for the Arts
- Latino Arts Network
- Western Arts Alliance (WAA)

### **Social Organizations**

The County's Planning Area is home to organizations that range in interests, including political, professional, senior, veteran, women's, and men's groups; Lesbian, Gay, Bisexual, Transsexual (LGBT); hobbies and sports; and youth, parents, health, and social organizations.<sup>24</sup>

### **Faith-Based Organizations**

- Within the County's Planning Area there are many places of worship for a wide range of beliefs.

Services these groups provide include counseling, homeless shelters, food kitchens, social gatherings, teen programs, senior programs, youth programs, and faith-based activities. While many of the organizations are located throughout the Valley, the majority is concentrated in urban areas.

Most religious facilities occupy their own permanent structures. However, the rapidly increasing cost of land has forced some congregations to explore other locations in which to hold their services. This trend, observed in many places characterized by rapid growth, has resulted in services being held in places such as storefronts and auditoriums within the County's Planning Area.

### **Local Programs**

#### **Arts for All**

Every public school student in Los Angeles County will receive a high-quality K–12 education of which the arts are an intrinsic part of the core curriculum. Each County school district will acknowledge that exposure to and participation in the multiple arts disciplines:

- strengthens a child's academic growth and development as an individual;

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<sup>24</sup> City of Santa Clarita, "City of Santa Clarita Resource Guide," <http://www.santa-clarita.com/cityhall/Parks/resource.asp>, 2009.

- prepares the child to feel a part of and make a positive contribution to the community; and
- ensures a creative and competitive workforce to meet the economic opportunities of the present and future.

Thus, sequential instruction in the multiple arts disciplines will be scheduled into the school day and included in the budget of every County school district.<sup>25</sup>

*Arts for All* had its origins in a meeting of Arts for LA, a consortium of leaders of Los Angeles County arts institutions, large and small, that took place in the late 1990s. The objective of the gathering was to identify issues that could be addressed only by the arts community as a whole, rather than by just one or a few organizations, no matter how influential. Arts education was one of the issues identified. The ad hoc Los Angeles Arts Education Task Force convened by the Los Angeles County Arts Commission met for the first time in 1999 and commissioned a study on the state of arts education in County K–12 public schools. *Arts in Focus: Los Angeles Countywide Arts Education Survey*, released in May 2001, was the first comprehensive look at arts education in the nation’s most populous county.

In response to *Arts in Focus*, and seeded by a California Arts Council grant, the Los Angeles County Arts Commission hired arts education staff and formed a Los Angeles County Arts Education Advisory Group to develop the Blueprint’s goals and strategies through an 18-month planning process.

To help guide the development of and garner broad support for the Blueprint, eight community forums were held early in 2002 with 150 policy makers, implementers, and recipients of arts education. The Blueprint proposes that systemic change can occur only through the cooperative participation of all stakeholders and by working to develop supportive policy and action at each level of involvement.

### ***Acquisition and Expansion of Facilities***

Because cultural facilities are not usually lucrative ventures, they often require ongoing public and private subsidy. Consequently, in an effort to economize, the shared use of cultural facilities is common throughout the Valley.

### ***Cultural Promotion***

The Los Angeles Arts Commission fosters excellence, diversity, vitality, understanding and accessibility of the arts in Los Angeles County. The Commission provides leadership in cultural services for the

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<sup>25</sup> Los Angeles County, 6<sup>th</sup> Year Review *Los Angeles County Regional Blueprint for Arts Education*. 2008.

County, including information and resources for the community, artists, educators, arts organizations and municipalities.

There are over 2,800 arts organizations and 150,000 working artists in the County of Los Angeles, creating the largest concentration of arts activity in the United States.

### ***Future Needs***

A market study to determine the viability of new cultural attractions within the County's Planning Area concluded that the Planning Area has enormous potential for arts attendance, as it can draw upon both the OVOV Planning Area and the northern San Fernando Valley. As the schools have reported a need for improved cultural performing and instructional facilities, many have current plans for development, including the Hart School District, College of the Canyons, The Masters College, and Newhall Elementary School/Theatre Arts for Children. The Civic Art Policy provides the County with a source of funds for the design and construction of capital projects for civic art.

### **Regulatory Context**

There are currently no applicable federal or state regulations that pertain to cultural amenities within the County Planning Area.

### ***Local Regulations***

#### **Civic Art Policy**

Civic art contributes significantly to the economic vitality of a region by improving the quality of the environment and fostering a positive community identity. Historically, artists have helped shape the great civic projects of other eras, from the federal monuments of our capital to the community treasures of the Works Projects Administration. The creation of the Los Angeles County Civic Art Program will integrate the skills of artists into capital improvement and major development projects, enhancing Los Angeles County for those who live here now and contributing to the creation of a legacy for generations to come. Beginning with the 2005–06 fiscal year, 1 percent of design and construction costs on new County capital projects has been allocated to a Civic Art Special Fund.

## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines* Appendix G identifies criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- A significant impact will occur if the build out of the County Planning Area has an increase in the demand on cultural amenities.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on cultural amenities within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.14-3                      Build out of the County's Planning Area will have the potential to have a significant impact on the access for locations of the many different cultural amenities.**

While exact future needs are difficult to predict, given the existing conditions, anticipated growth, and competing land use interests between schools and other public facilities, there is an opportunity to share resources within the County's Planning Area. Examples include mixed-use facilities such as cafeteria-auditorium multi-purpose rooms; library facilities; joint-use of technological resources between schools and the community; and shared recreational facilities between parks and schools. As the build out of the County's Planning Area increases, the demand on different cultural amenities will increase. This increase would require more meeting space to accommodate the increase in population. The update of the Civic Arts Program would help to coordinate the different amenities throughout the County Planning Area (Policy LU 8.1.6).

## *Proposed Area Plan Policies*

**Policy LU 8.1.6:**                      Coordinate with the Arts Alliance and other similar entities to promote access to cultural events and facilities for all residents.

## *Effectiveness of Proposed Area Plan Policies*

The implementation of the proposed Area Plan policies would enhance the access and potentially allow for the joint use of facilities.

## Plan to Plan Analysis

Both the existing Plan and the proposed Plan provide policies directed to preserving cultural amenities. However, as the population increases the need for meeting space will increase and the existing Plan does not have policies to address this increase. Therefore the existing Plan would have greater impacts when compared to the proposed plan with respect to cultural amenities.

## Mitigation Framework

No mitigation measures required.

## Significance of Impact with Mitigation Framework

The implementation of the proposed Area Plan policies would reduce potential impacts on cultural amenities to less than significant.

## HOMELESS AND EMERGENCY SHELTER SERVICES

### Summary

This section describes the homeless and emergency shelter services and programs provided within the OVOV Planning Area. It includes data from two recent reports on homelessness in the Santa Clarita Valley. The discussion in the section pertains to homelessness in the County's Planning Area based on data obtained from the County and the City of Santa Clarita. The OVOV Planning Area offers a temporary homeless shelter during the winter months from December 1 to March 15 of each year.<sup>26</sup>

### Existing Conditions

#### *Homelessness*

Homelessness occurs for a variety of reasons. Homelessness is the condition and social category of people who lack housing, because they cannot afford, or are otherwise unable to maintain, regular, safe, and adequate shelter. A wide variety of factors contribute to homelessness, but they can be thought of as falling into one of two categories: structural problems and individual factors that increase vulnerability. Structural problems include a lack of affordable housing, changes in the industrial economy leading to unemployment, inadequate income supports, and the erosion of family and social support. Added to this

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<sup>26</sup> Santa Clarita Valley Emergency Winter Shelter, <http://www.santaclaritashelter.com/Pages/Services.html>, 2008.

are factors that increase an individual's vulnerability, such as physical or mental illness, disability, substance abuse, domestic violence, or job loss.

### **Definitions of “Homeless” and “At-Risk to Homelessness”**

Several definitions of homelessness are available. The California Department of Housing and Community Development (HCD), defines “homeless persons” as those persons whose nighttime residence is either a temporary shelter or a public or private space not designated for shelter.

There was a report on homelessness commissioned during 2002, which was a collaborative effort of the County of Los Angeles and the City of Santa Clarita. The report offered a different definition of homelessness. According to the report, “Report on Homelessness in the Santa Clarita Valley,” which was prepared by the Los Angeles County’s Santa Clarita Valley Service Center, the “homeless” are those who are currently without permanent housing, and those deemed “at-risk” are those who are unlikely to be able to afford a place to live in the immediate future.

The Santa Clarita Community Development Corporation (SCCDC) operates a cold weather shelter in Santa Clarita during the winter months. Data provided by SCCDC shows that during the winter of 2006-2007, shelter was provided to a total of 196 homeless persons including members of 22 homeless families. **Table 3.14-1, Number of Homeless Clients in 2006–2007 Winter Shelter**, provides data on the client type, and age of the people who used the winter shelter and its daytime case management program. There were 97 single adult males and 28 single adult females during the shelter season. Table 3.14-1 also shows that 22 families, with 40 children under age 18, used the shelter. **Table 3.14-2, Age of Homeless Clients in 2006–2007 Winter Shelter**, shows that 20 youth ages 18 to 23 used the shelter. 38.3 percent of the adults were age 24 to 44 and another 20.9 percent were age 45 to 54. As seen in **Table 3.14-3, Race/Ethnicity of Homeless Clients in 2006–2007 Winter Shelter**, nearly 60 percent (59.5 percent) of clients were White, 19 percent were Latino, and 16 percent were African American. There were six clients who identified themselves as either American Indian or Alaska Native.

In the 2007-2008 winter shelter period, the Santa Clarita emergency winter shelter (EWS) housed 239 persons between December 6, 2007, and March 15, 2008, including 26 families with 60 children. This was a 20 percent increase in persons housed over the 2006–2007 winter shelter period and probably reflects the deepening mortgage crisis, with its attendant evictions and increases in unemployment and in the cost of rent. The outcome of shelter case management in 2007-2008 was that 27 persons found jobs and 25 persons/or families found permanent housing.

**Table 3.14-1**  
**Number of Homeless Clients in 2006–2007 Winter Shelter**

Client Type	Shelter Number	Day Case Management
Single Adult Males	97	43
Single Adult Females	28	221
Families	22	21
Adult Family members	34	33
Child Family members	40	39
		(not included in total)
Unduplicated Total	196	85

*Source: City of Santa Clarita Draft General Plan Housing Element, 2009.*

**Table 3.14-2**  
**Age of Homeless Clients in 2006–2007 Winter Shelter**

Age	Number	Percent
Children 17 and under	40	20.4
Youth 18 to 23	20	10.2
24–44	75	38.3
45–54	41	20.9
55–69	14	7.1
70+	1	2.6
Data not available	5	2.6
<b>Total</b>	<b>196</b>	<b>100</b>

*Source: City of Santa Clarita Draft General Plan Housing Element, 2009.*

**Table 3.14-3**  
**Race/Ethnicity of Homeless Clients in 2006–2007 Winter Shelter**

Race/ Ethnicity	Number	Percent (%)
American Indian or Alaska Native	6	3.7
Asian	1	0.6
Black or African American	26	16.0
Native Hawaiian or other Pacific Islander	2	1.2
Latino or Hispanic	31	19.0
White	97	59.5
Total (children not included)	163	100.0

*Source: City of Santa Clarita, Draft General Plan Housing Element, 2009.*

There is no emergency shelter in the OVOV Planning Area that is open 12 months a year. During the winter months (December through March 15), the SCCDC operates a cold weather shelter funded by the Los Angeles Homeless Services Authority (LAHSA) on a site approved only for temporary use. In an agreement with the City of Santa Clarita, the site must be rotated every three years to a different location. The County's Zoning Ordinance allows homeless shelters in certain zones with a Director's Review or Conditional Use Permit. The City of Santa Clarita is proposing to amend the uniform development code (UDC) to allow transitional housing in City in zones with the same requirements as multifamily residential projects. Currently, there is no transitional housing for either individuals or families in the OVOV Planning Area.

### ***Resources and Solutions***

The SCCDC EWS operates from about December 1 to March 15 each year. The EWS provides overnight shelter, food, clothing, medical and mental health services as well as other assistance and referrals. The shelter is not open during the day. Daytime case management for shelter residents and for homeless families is provided through a contract with another service provider at Bethlehem Church. Families who comply with case management objectives can receive motel vouchers for up to one month.

In 2008, Lutheran Social Services, which has an office in Canyon Country, will also provide motel vouchers for homeless families in Santa Clarita. This effort will supplement services provided at the EWS, which is open only between December and March and is not open during the day. The voucher provides up to 90 days of shelter. Lutheran Social Services will provide vouchers for up to 90 days of shelter for to



up to five families per month; if each family uses the vouchers for the maximum of 90 days, the vouchers will assist 20 families per year.

### ***Eviction Prevention Services***

Lutheran Social Services operates an eviction prevention program, providing one-time payments to assist with housing costs in order to help families with short-term cash flow problems stay in their homes. Moving costs can also be provided under this program for households who need to move to a lower-cost apartment.

### ***DPSS Homeless Assistance Program***

The County's Department of Public Social Services continues to provide one-time homeless assistance to families eligible for CalWorks. Covered expenses include up to 16 days in a motel and move-in costs for permanent rental housing. Funds are also available to prevent eviction by paying two months of overdue rent or mortgage payments.

While there is no current figure available for the number of homeless persons in the County's Planning Area, according to the 2000 Census there are 1,341 people living in non-institutionalized, group housing quarters in the OVOV Planning Area.<sup>27</sup> The transitory nature of homeless persons inhibits the ability to accurately assess the number of homeless persons in the County's Planning Area. Census data is unable to provide this data, and as indicated by the two reports on homelessness in the OVOV Planning Area, surveys of this population are inaccurate as well.

### ***Service Providers and Programs***

The Santa Clarita Valley Service Center, managed by the Los Angeles County Department of Community and Senior Services, is one of the Santa Clarita Valley's major providers of services for the homeless. The Center receives a portion of its funding from Community Development Block Grant funds made available by the County and City as part of its homelessness intervention and prevention efforts. The Center intends to publish and make available a directory of organizations and facilities that serve the Valley's homeless populations, such as human services agencies, churches, and other non-profit organizations. Service providers believe that the needs of the homeless can best be met by providing emergency shelters and transitional housing close to where services are located.

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<sup>27</sup> This category is not exclusive to people living in temporary or emergency shelters.

A variety of programs and facilities are available to homeless persons within the OVOV Planning Area.<sup>28</sup> Services located within the Valley include:

- Single Mother's Outreach
- Society of Saint Vincent de Paul Conference of Santa Clarita
- The Bible Tabernacle
- National Conference on Alcoholism and Drug Dependence
- Santa Clarita Child and Family Center
- Santa Clarita Community Development Corporation
- Santa Clarita Food Pantry
- Santa Clarita Mental Health Center
- Santa Clarita Valley Service Center

The Santa Clarita Child and Family Center provides mental health counseling for children and adults, and the Santa Clarita Valley Mental Health Center provides extensive services in crisis intervention, case management, and rehabilitation. The Santa Clarita Community Development Corporation provides family aid programs. The National Council on Alcoholism and Drug Dependence provides outpatient alcohol and drug counseling referrals. Single Mother's Outreach provides housing, food, clothing, and job referrals for this at-risk population.

The Society of Saint Vincent de Paul helps families to become self-sufficient, through financial, medical, and food support. The Bible Tabernacle has a long-term rehabilitation program. The Santa Clarita Valley Food Pantry is a nonprofit, nonsectarian community-based volunteer organization dedicated to the distribution of food to people with demonstrated need, on a short-term basis. In addition, a supplemental nutrition program for Woman, Infants, and Children (WIC) is available to provide infant formula, and supplemental food vouchers for nutritionally at-risk infants and pregnant women.

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28 Santa Clarita Valley Emergency Winter Shelter Task Force, "Final Report," [http://www.santa-clarita.com/cityhall/agendas/council/print\\_attachment.asp?ID=5412](http://www.santa-clarita.com/cityhall/agendas/council/print_attachment.asp?ID=5412), 2007.

The Santa Clarita Valley Service Center located in Newhall also provides assistance to those who are battered persons, victims of crime, and/or have been subject to adult abuse. However, it does not provide any permanent shelter.<sup>29</sup>

## Emergency Shelters

Persons requiring emergency shelter can be divided into two categories: (1) those who require temporary shelter for reasons primarily involving, but not limited to, damage to their place of residence (through flood, fire, and earthquake) and (2) those who are homeless.

The Santa Clarita Community Development Corporation has recently completed a continuum of care system to meet the needs of Santa Clarita Valley's homeless. As part of that effort, the department completed a transitional housing report to identify the housing needs of the homeless population.

According to the transitional housing report underway by the City's Department of Parks, Recreation, and Community Services, there is currently one short-term emergency winter shelter in the OVOV Planning Area. The Santa Clarita Community Development Corporation operates the emergency winter shelter that operates nightly from November to April. There are no known permanent shelters in the unincorporated Planning Area.

The Santa Clarita Community Development Corporation also provides motel vouchers, as does the Society of St. Vincent de Paul and the Salvation Army. The Santa Clarita Valley contains facilities for battered persons and disaster relief programs. Most individuals utilizing emergency shelters are residents of the Santa Clarita Valley.<sup>30</sup>

The Domestic Violence Center and Single Mother's Outreach are both nonprofit organizations that serve women and children victims of domestic violence, and both provide transitional housing for up to two years, as well as extensive rehabilitative services. Single Mother's Outreach also serves pregnant women.

In case of disaster, there are numerous groups available to provide emergency shelter within the Santa Clarita Valley. These groups include the American Red Cross—Santa Clarita Valley District, the City of Santa Clarita, the Los Angeles County Fire Department, and the Los Angeles County Sheriff's

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<sup>29</sup> City of Santa Clarita, Department of Parks, Recreation, and Community Services, 2002

<sup>29</sup> Santa Clarita Valley Emergency Winter Shelter, <http://www.santaclaritashelter.com/index.asp>, 2008.

<sup>29</sup> City of Santa Clarita, Department of Parks, Recreation, and Community Services, 2002

<sup>30</sup> Santa Clarita Valley Emergency Winter Shelter, <http://www.santaclaritashelter.com/index.asp>, 2008.

Department. According to the Sheriff's Department, all public buildings in the Valley are available to provide temporary quarters in case of an emergency.

## **Regulatory Context**

### ***Federal Regulations***

#### **Title 24-Housing and Urban Development Part 91 Consolidated Submissions For Community Planning And Development**

The Consolidated Plan is a document required by the U.S. Department of Housing and Urban Development (HUD) in order to apply for funding under the following programs: Community Development Block Grant (CDBG), Home Investment Partnerships Program (HOME), Housing Opportunities for Persons with AIDS (HOPWA), Emergency Shelter Grant (ESG), and some competitive grant programs like the McKinney Supportive Housing Program.<sup>31</sup>

### ***State Regulations***

#### **Senate Bill 2**

The Legislature finds and declares all of the following:

- (b) Because homelessness affects people of all races, gender, age, and geographic location there is a growing need for every city and county to plan for the location of adequate emergency shelters. Many people experiencing homelessness, primarily youth and single individuals, need shelter but also have a need for residential substance abuse and mental health services.
- (d) In order to ensure access to services in every city and county for homeless individuals and families, it is important that cities and counties plan for these services to address the special needs and circumstances of this threatened population.
- (e) It is the responsibility of cities and counties to plan and identify areas for emergency shelters. Cities and counties should include this as part of their planning process and locate emergency shelters where most appropriate in their community. The state should not dictate where these emergency shelters should be located.
- (f) It is the responsibility of the Legislature to promote strong communities and ensure that housing and residential services are available in all communities.

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<sup>31</sup> 24 CFR 91.205

### **State Affordable Housing Trust Fund**

This regulation allows for funds for affordable rental housing and homeownership attainable for many residents of the state and has been able to create ongoing, effective programs to construct and preserve affordable housing.

### ***Local Regulations***

#### **County of Los Angeles**

The Los Angeles Homeless Services Authority (LAHSA) is a Joint Powers Authority established in 1993 as an independent agency by the County and the City of Los Angeles. LAHSA is the lead agency in the Los Angeles Continuum of Care, and coordinates and manages over \$70 million dollars annually in federal, state, county and city funds for programs providing shelter, housing, and services to homeless persons in Los Angeles County and City of Los Angeles.<sup>32</sup>

Through LAHSA, funding, program design, outcomes assessment and technical assistance is provided to over 100 non-profit partner agencies who operate within the County assisting persons who are homeless achieve independence and stability in permanent housing. Partner agencies provide a continuum of programs ranging from outreach, access centers, emergency shelters, safe havens, transitional and permanent housing, and prevention along with the necessary supportive services designed to provide the tools and skills required to attain a stable housing environment.

Specialized programs funded through LAHSA address a wide range of issues related to homelessness, including but not limited to: domestic violence, mental illness, substance abuse, job training, family strengthening, health, mainstream benefits enrollment, and most importantly, supportive short- and long-term housing. Additionally, LAHSA partners with both the County of Los Angeles and the City of Los Angeles to integrate services and housing opportunities to ensure wide distribution of service and housing options throughout the Los Angeles Continuum of Care. The Commission is empowered with making budgetary, funding, planning and program policies and decisions.

#### ***LAHSA Legislative Agenda 2008***

LAHSA has adopted the following legislative agenda for 2008. These policy priorities are in line with LAHSA's mission to support, create, and sustain solutions to homelessness in Los Angeles County. LAHSA's federal policy priorities include McKinney Vento Homeless Assistance Program

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<sup>32</sup> Los Angeles Homeless Services Authority, <http://www.lahsa.org/about.asp>, 2008.

reauthorization and funding, homeless services for supportive housing, affordable housing, and housing and services for successful post-incarceration reentry. State priorities this year include development and maintenance of permanent supportive housing and affordable housing and increased access to existing federal and state funding streams.<sup>33</sup>

## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- A significant impact will occur if the future population growth from the implementation of the proposed Area Plan will increase demand on the availability of affordable housing and the resources of providing an adequate amount of emergency shelters.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on homelessness and emergency shelter availability within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

### **Impact 3.14-4            Build out of the County's Planning Area has the potential for a significant impact on emergency shelters and the availability of affordable housing.**

The Housing Element in the Countywide General Plan and the Population/Housing section in this EIR addresses the need for affordable housing, housing for people with special needs, constraints to providing affordable housing, the agency's progress in meeting its housing goals, quantified objectives for provision of housing, a survey or adequate sites for housing, a resource inventory, and identification of at-risk affordable units and methods of preservation. During the next Housing Element update process in 2014, the programs established in that element will be evaluated to determine the County's level of success in meeting its objectives. Programs identified within the Housing Element help to attain the policies assisting in the development of affordable housing for not only senior housing, but for extremely low, very low, low and moderate income housing.

Each senior receives a comprehensive assessment to determine housing needs. They are then provided with a wide array of housing-related services, which help them maintain independent living in the least

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<sup>33</sup> Los Angeles Homeless Services Authority, "Legislative Agenda 2008," <http://www.lahsa.org/docs/policyandplanning/lahsa2008legislativeagenda.pdf>, 2008.

restrictive manner possible. Similar programs could be utilized in this way to help the overall homeless population to be able to live in housing (**Policy S 6.3.1**). The current winter shelter has found four new sites that will be used for two years and then rotated to the next site (**Policy LU 8.1.8**).

Emergency shelters are usually located at community centers and schools (**Policy S 7.2.1**). The maintenance of these areas and the accessibility during a disaster are extremely important. These types of areas are only to be used for temporary shelters. In case of a major disaster the state and federal governments would have to provide the necessary long term shelters.

### ***Proposed Area Plan Policies***

- Policy S 6.3.1:** In cooperation with other agencies, ensure adequate shelter for homeless persons to limit their exposure to accidental injury and illness.
- Policy S 7.2.1:** In cooperation with other agencies, plan for temporary shelters for residents displaced by disasters and emergency incidents.
- Policy LU 8.1.8:** Work with social service agencies providing assistance to homeless persons to develop and maintain a suitable shelter in the Santa Clarita Valley.

### ***Effectiveness of Proposed Area Plan Policies***

The implementation of the proposed Area Plan policies would help to ensure that there are adequate emergency shelters in the case of an emergency. The policies also encourage assistance to homeless persons through social service agencies and suitable shelters. Implementation of the above policies would minimize potentially adverse impacts on homelessness and emergency shelter services.

### **Plan to Plan Analysis**

Both the existing Area Plan and the proposed Plan provide for the availability of affordable housing and emergency shelters. Both plans would be similar with respect to affordable housing and emergency shelters.

### **Mitigation Framework**

No mitigation measures are required.

### **Significance of Impact with Mitigation Framework**

The proposed Area Plan policies would reduce any potential significant emergency shelter or homelessness impacts to less than significant.



### EXECUTIVE SUMMARY

This section discusses community facilities, health and social services, education, fire protection, and police protection within the County's Planning Area. The County's Planning Area consists of unincorporated land outside of the City's boundaries and adopted Sphere of Influence (SOI) but within the One Valley One Vision (OVOV) Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Both the County and City Planning Areas comprise the OVOV Planning Area. Implementation of the proposed Santa Clarita Valley Area Plan will allow development that will potentially impact public services. This environmental impact report (EIR) section examines the effects of Area Plan buildout on public services. Potential impacts on public services were found to be less than significant.

### Community Facilities

#### *Library Services*

To determine the potential impacts on community facilities from the proposed buildout of the County's Planning Area, an analysis of the number of library items, such as books, periodicals, videos, CDs and CD-ROM software, audio recordings, audio books, DVDs, and pamphlets; and library space was conducted. Each service level guideline, from the County of Los Angeles Public Library system, consisted of

- 2.75 items per 1,000 residents, and
- 0.5 square foot per 1,000 residents.

Currently, there are 595,314 available library items and 48,605 square feet of library space for the five libraries located within the OVOV Planning Area. Based on the service level guidelines, there is a surplus of 389,064 library items and a surplus of 11,105 square feet of library space. At buildout there would need to be 652,814 library items and 118,694 square feet of library space. With implementation of the proposed Area Plan policies and mitigation measure **MM 3.15-1** provided in this section, the potential impacts on community facilities would be less than significant.

## Health Services

The County's Planning Area has a diverse range of age groups requiring adequate medical facilities in order to maintain a healthy life. Age groups that typically require more medical attention are newborns and the elderly, age 65 or older. As of 2007, 10.2 percent of the population consists of the age group 65 or older. If trends stay the same then, at buildout, 36,557 people, or 15.4 percent, of the projected 237,387 residents would be age 65 or older. Every population would require adequate health care within the County's Planning Area, not just newborns and the elderly. With the implementation of the proposed Area Plan policies, potentially significant impacts on health and social services would be less than significant.

## Education

The County's Planning Area currently has six school districts:

- Acton-Agua Dulce Unified School
- Newhall Elementary
- Saugus Union Elementary
- Castaic Union
- Sulphur Springs Union Elementary
- William S. Hart Union High School

The school districts, as of 2008, educate 14,299 students from kindergarten to grade 12. The school districts design capacity is 15,702 students. There are no school districts over capacity; however there are five schools over capacity. Implementation of the Area Plan would potentially increase the number of new students within the County's Planning Area. Implementation of the proposed Area Plan policies, and Senate Bill 50 would reduce impacts on school districts to less than significant.

## Fire Protection

Fire protection within the County's Planning Area is supplied by the Los Angeles County Fire Department (LACoFD) with six stations currently located in the County's Planning Area. The LACoFD has several standards to maintain to adequately meet the fire protection needs of the residents of the County's Planning Area. The current standards for response times are:

- 5 minutes or less for response times for urban areas,

- 8 minutes or less for suburban areas, and
- 12 minutes or less for rural areas.

The 2008 median response time for the OVOV Planning Area was 5 minutes 42 seconds. To adequately meet the standards for each area, there would need to be an increase in the number of fire stations. Joint cooperation between the County, the City of Santa Clarita, and state and federal agencies would also contribute to maintaining adequate response times. Implementation of the proposed policies, and mitigation measures **MM 3.15-2** and **MM 3.15-3** would reduce potential impacts on fire protection to less than significant.

### **Police Protection**

Law enforcement in the County's Planning Area is served by the Los Angeles County Sheriff's Department with the California Highway Patrol maintaining jurisdiction over the state highways. The Sheriff's Department, which operates one station in Valencia and a storefront station in Newhall, has a standard of one officer per 1,000 residents to maintain effective police protection. The current number of sworn officers within the County's Planning Area is 171, which provides one officer per 439 residents. With the projected buildout of the Planning Area, the number of officers required to maintain a standard of one officer per 1,000 residents would need to be 237 for the projected population of 237,387 residents. In order to maintain adequate service the County's Planning Area would need an additional 66 sworn officers. With the implementation of the proposed Area Plan policies and mitigation measure **MM 3.15-4**, potential impacts on law enforcement would be less than significant.

## **COMMUNITY FACILITIES**

### **Summary**

This section describes the facilities and programs administered by the County. Community facilities in the County's Planning Area include libraries, community centers, and meeting rooms. Impacts on community facilities were found to be less than significant with the implementation of mitigation measure **MM 3.15-1** and the incorporation of the Area Plan policies.

## Existing Conditions

### *Libraries*

The County of Los Angeles Public Library (Library) operates all public libraries within the OVOV Planning Area. There are four County libraries and mobile library services within the OVOV Planning Area. These libraries include Canyon Country Jo Anne Darcy Library, Castaic Library (located in the County's Planning Area), Newhall Library, Valencia Library, and the Santa Clarita Valley Bookmobile. **Figure 3.15-1, Library Locations in the OVOV Planning Area**, shows the general library locations. The public schools in the County's Planning Area maintain their own library collections. The Master's College and the California Institute of the Arts also provide private library facilities, and College of the Canyons has a library that is open to the public.

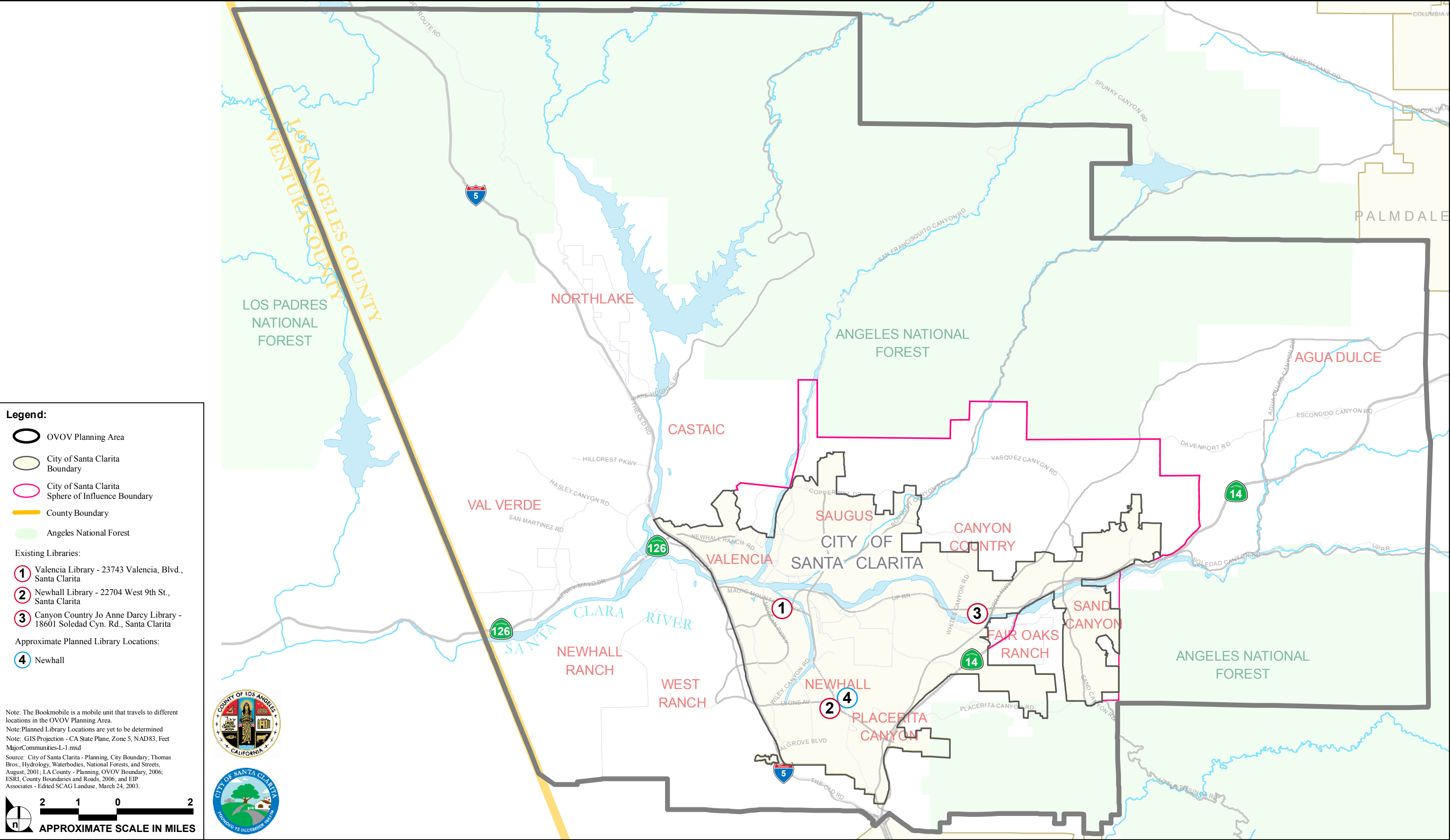
The libraries are open varying hours six to seven days per week; with Valencia Library open Sunday afternoons. Typical library hours range from 10:00 AM to 8:00 PM., on weekdays, with reduced hours on the weekends.

### **Collections**

The Library has an automated circulation system that inventories available materials. As of December 2008, the County's Planning Area libraries and bookmobile comprised 560,314 items out of the overall County Library collection (**Table 3.15-1, Existing Library Resources within the OVOV Planning Area**).<sup>1</sup>

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<sup>1</sup> County of Los Angeles Public Library, "Canyon Country, Newhall, and Valencia," <http://www.colapublib.org/libs/newhall/>. 2008.



SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2009

FIGURE 3.15-1

Library Locations in the OVOV Planning Area

**Table 3.15-1**  
**Existing Library Resources within the OVOV Planning Area**

<b>Library</b>	<b>Facility Size (sf)</b>	<b>Resources Available (books, audio and video recordings, periodicals, etc.)</b>
Canyon Country Jo Anne Darcy <sup>1</sup>	12,864	117,891
Newhall <sup>2</sup>	4,842	91,280
Valencia <sup>3</sup>	23,966	340,203
Castaic Library <sup>4</sup>	6,800	35,000
Santa Clarita Valley Bookmobile <sup>5</sup>	133	10,940
<b>Total</b>	<b>48,605</b>	<b>595,314</b>

Source:

<sup>1</sup> County of Los Angeles Public Library, <http://www.colapublib.org/libs/canyoncountry/>

<sup>2</sup> Ibid. <http://www.colapublib.org/libs/newhall/>

<sup>3</sup> Ibid. <http://www.colapublib.org/libs/valencia/>

<sup>4</sup> Personal communication between Andrea Kish, Assistant Region Administrator and Chris Hampson, Impact Sciences, Inc., on March 10, 2009. The bookmobile is 133 square feet and is 27.5 feet long.

<sup>5</sup> Ibid. <http://www.colapublib.org/libs/santaclarita/>

The Library has a countywide collection in excess of 8,558,172 items, which includes books, periodicals, videos, CDs and CD-ROM software, audio recordings, audio books, DVDs, and pamphlets.<sup>2</sup> County libraries also participate in an interlibrary loan program with other local and national libraries in order to make available an even larger selection of materials. The 2008 population within the County's Planning Area was 75,000.<sup>3</sup> The Library's current planning guidelines specify 2.75 library material items per capita and 0.5 square foot per capita. The current demand for the County's Planning Area is 206,250 library material items, and facility space totaling 37,500 square feet. The current library material items consist of 595,314 items and are housed in buildings totaling 48,472 square feet of facility space.<sup>4</sup> The current amount of square feet of facility space, as per the Library standard, is in a surplus of 4,172 square feet. Therefore, the existing libraries in the Santa Clarita Valley meet the County's service level guideline for library items and meet the guideline for available library space per capita.

<sup>2</sup> County of Los Angeles County Library, "Statistics," <http://www.colapublib.org/aboutus/info.html>, 2008.

<sup>3</sup> City of Santa Clarita, "Santa Clarita Valley Sheriff's Statistical Summary," [http://www.scvsheriff.com/news\\_incident\\_summary.asp](http://www.scvsheriff.com/news_incident_summary.asp). Accessed 2008.

<sup>4</sup> See **Table 3.15-1** for information on source information.

## Planned Construction

Library facilities are planned to be constructed during the years 2007 through 2016 in order to meet the needs of the OVOV Planning Area. The planned total square feet is summarized in **Table 3.15-2, Planned Construction for the County's Planning Area.**

**Table 3.15-2**  
**Planned Construction for the County's Planning Area**

Year	Library Location	Square Feet
2012–2016	Newhall Ranch	34,000
2012–2016	Stevenson Ranch	26,000
	<b>Total</b>	<b>60,000</b>

*Source: California Public Library Building Needs by Library Jurisdiction. <http://www.library.ca.gov/lds/docs/PubLibBuildingNeedsByJurisdiction04162007.pdf>. 2008.*

## Special Services

In addition to the regular collection, the libraries maintain local and regional history collections. The collections are housed in the three cluster libraries which are Canyon Country, Newhall, and Valencia libraries.<sup>5</sup> The collections include photographs, rare books, newspapers, and artifacts that are available for public review. The libraries offer a number of services to assist their users. Computer services include an on-line catalogue and Internet access.

## Funding

All County libraries are funded by a number of sources, listed here in descending proportions:

- property taxes,
- County General Fund Allocation (which the Board of Supervisors approves annually),
- a voter-approved special tax for the unincorporated areas and 11 cities (including the City of Santa Clarita) served by the Library,
- revenue from fines and fees, and
- developer fees for new residential development in the County's Planning Area.

<sup>5</sup> See **Table 3.15-1** for information on source information.

Because the Library is a special district almost wholly dependent on the property tax, revenue has declined since the passage of Proposition 13 in 1978, resulting in significant cutbacks in library services. Alternative financing methods have been used to augment the property tax, including a Mello-Roos Community Facilities District, developer impact fees or developer agreements, and a voter-approved special tax.

### **Governance**

In 1994, the Los Angeles County Board of Supervisors formed the County Library Commission, which consists of 20 members. Each Supervisor appoints two commissioners who are residents of their respective supervisorial districts. The remaining 10 are appointed from a pool of elected city council members in the cities served by the Library. The Commission serves as an advisory group to the Board of Supervisors to help guide the Library's financial and programming goals, and provides a forum for public input.<sup>6</sup>

### **Regulatory Context**

Library services are addressed through the efforts of various state, local government agencies, and private agencies. These agencies work jointly, as well as individually, to provide and improve the library services of particular areas through legislation, regulations, planning, policy making, education, and a variety of other programs.

### ***State Regulations***

#### **California Library Services Act**

It is the intent of the State Legislature<sup>7</sup> to provide all residents the opportunity to obtain from their public libraries needed materials and informational services by facilitating access to the resources of all libraries in California. This policy shall be accomplished by assisting public libraries to improve service to the underserved of all ages, and by enabling public libraries to provide their users with the services and resources of all libraries in this state.

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<sup>6</sup> Anne Browning McIntosh, Mayor's Committee on Managed Growth for a Quality Community, 2001

<sup>7</sup> California Code of Regulations. Chapter 4. Section 18700 to 18703. "California Library Services Act."



## **California Reading and Literacy Improvement and Public Library Construction and Renovation Bond Act of 2000**

The Legislature finds and declares the following:<sup>8</sup>

- Reading and literacy skills are fundamental to success in our economy and our society;
- The Legislature and Governor have made enormous strides in improving the quality of reading instruction in public schools;
- Public libraries are an important resource to further California's reading and literacy goals both in conjunction with the public schools and for the adult population; and
- The construction and renovation of public library facilities is necessary to expand access to reading and literacy programs in California's public education system and to expand access to public library services for all residents of California.

### ***Local Regulations***

#### **Library Facilities and Technology Mitigation Fee<sup>9</sup>**

Library impact fees are currently collected for new residential development within the County's Planning Area. The current library impact fee for the County's Planning Area is \$790 per residential unit. The mitigation fee is subject to an annual Consumer Price Index (CPI) adjustment on July 1 of each year. In addition, State Bond Act money is available to all public libraries through competitive applications for state matching grants in three funding cycles. On June 3, 1997, Proposition L was passed by a two-thirds majority, which assessed an annual special tax for library services. Effective July 1, 2006, the special tax is \$25.72 per parcel.

### **Thresholds of Significance**

In order to assist in determining whether a project will have a significant effect on the environment, the *California Environmental Quality Act (CEQA) Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

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<sup>8</sup> Education Code Title 1, Division 1, Part 11, Chapter 12, Articles 1-3, Sec. 19985-20011. "General Provisions."

<sup>9</sup> County of Los Angeles Zoning Code. Section 22.72.030. "Establishment of Library Facilities Mitigation Fee."

- A significant impact will occur if future population growth from the implementation of the Area Plan will increase demand for library services beyond the existing capacities of libraries serving the County Planning Area.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on library services within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-1**      **A potentially significant impact will occur if future population growth from the implementation of the Area Plan will increase demand for library services beyond the existing capacities of libraries serving the County's Planning Area.**

Implementation of the proposed Area Plan would result in the potential for increased demand for library services within the County's Planning Area to the extent that expansion and construction of new facilities would be required. The projected population for complete buildout in the County's Planning Area is 237,387. **Table 3.15-3** summarizes the library resources for the County with existing conditions and conditions at Area Plan buildout.

The expected population at buildout of the Area Plan is 237,387; this population would require 652,814 library items and 118,694 square feet of library space. As stated above (Planned Construction) the amount of planned square footage by 2016 is 60,000. As the County reaches buildout, the Library system would have an additional 57,500 items to meet the guidelines of 2.75 library items per 1,000 residents, and an additional 10,089 square feet to meet the 0.5 square foot per capita criterion.

**Table 3.15-3**  
**Existing and Proposed Library Resources within the OVOV Planning Area**

Population	Guidelines		Existing Resources		Surplus or Deficit (-)	
	Library Items	Square Feet	Library Items	Square Feet	Library Items	Square Feet
2008						
75,000	206,250	37,500	595,314 <sup>1</sup>	48,605 <sup>1</sup>	389,064	11,105
Buildout (2030)						
237,387	652,814	118,694	N/A	108,605 <sup>2</sup>	57,500 <sup>3</sup>	10,089

<sup>1</sup> From Table 3.15-2.

<sup>2</sup> Total of the existing amount of square feet from Table 3.15-2 and planned construction from Table 3.15-3.

<sup>3</sup> This is the amount of library items needed to meet the goal of 550,000 items based on the existing number of library items.

As buildout of the County increases, additional residential units would be built. The development of these units would need to meet the current library mitigation fee to apply towards the goals set in the County's Zoning Code (**Policy LU 8.1.5**). With implementation of the proposed Area Plan policy and the implementation of the following mitigation measure, impacts on library services would be less than significant.

### ***Proposed Area Plan policies***

**Policy LU 8.1.5:** Coordinate with the Los Angeles County Library System to assist in expanding library services as needed to meet the needs of the community.

### ***Effectiveness of the Proposed Area Plan Policies***

The proposed Area Plan policy focuses on the County's ability to provide adequate library facilities and services.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans contain policies intended to minimize impacts to library resources. As the projected population for the existing Area Plan at buildout is more than the projected population for the proposed Area Plan at buildout, impacts on library service would be fewer with the proposed Plan.

### **Mitigation Framework**

The implementation of the following mitigation measure would reduce potential impacts on library services to a less than significant level.

**MM 3.15-1** Project developers shall pay the current library fee at the time of building permit issuance (\$790.00 per residential unit as of August 2008) to the County of Los Angeles to offset the demand for library items and building square footage generated by the proposed project. The library mitigation payment shall be made on a building permit by building permit basis by the developer for residential projects.

### **Significance of Impact with Mitigation Framework**

Implementation of the above proposed Area Plan policy with the incorporation of mitigation measure would reduce potential impacts on library services to less than significant.

## HEALTH SERVICES

### Summary

This section describes the existing health care facilities and social services programs in the County's Planning Area. The fastest-growing population segment in the County's Planning Area is ages 50 and older. Impacts on health care facilities and social services programs were found to be less than significant with the incorporation of the proposed Area Plan policies.

### Existing Conditions

#### *Healthcare Facilities*

The Henry Mayo Newhall Memorial Hospital (HMNMH) is the primary acute care hospital serving the County's Planning Area. Additionally, the County's Planning Area is served by the Santa Clarita Convalescent Hospital in Newhall.<sup>10</sup> Facey Medical Group is the largest medical care provider with multiple facilities in the Santa Clarita Valley including offices in Castaic, Santa Clarita, Canyon Country, and Valencia.<sup>11</sup>

#### **Henry Mayo Newhall Memorial Hospital**

The HMNMH is the only hospital and emergency services facility in the Santa Clarita Valley. The hospital Master Plan is designed to provide additional enhanced inpatient and outpatient treatment capacity. At buildout, the amount of hospital and medical office space on site (not including parking structures) would increase by 327,363 net square feet to 667,434 square feet, nearly double that of its current 340,071 square feet. The Master Plan would be implemented over a 15-year period.

The HMNMH is a 221-bed, full-service, not-for-profit community hospital focused on serving the Santa Clarita Valley since 1975. A 14-member volunteer board of directors governs the hospital, with over 1,000 employees and 360 medical staff members. More than 43 percent of the Santa Clarita Valley's hospitalization needs and 76 percent of emergency medical needs are met by the HMNMH on its medical campus on McBean Parkway between the Westfield Valencia Town Center and Interstate 5. All hospital inpatient services operate 24 hours a day, seven days a week with most admissions occurring Monday through Friday, and the highest number of Emergency Room visits on evenings and weekends. The hospital provides both inpatient and outpatient services in imaging, surgery, cancer care, heart, digestive,

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<sup>10</sup> City of Santa Clarita, Department of Parks, Recreation, and Community Services, (2000).

<sup>11</sup> <http://facey.com/events.php>

and rehabilitation care. Inpatient services such as intensive care, definitive observation, maternity/women's, medical/surgical, and behavioral health are provided by licensed nursing staff. The hospital is also a Level II Trauma Center (provides comprehensive trauma care and provides 24-hour availability of all essential specialties, personnel, and equipment), and provides for trauma services within a 680-square-mile area.

The hospital campus is “home” to many hospital-affiliated physician specialists and essential hospital-owned outpatient services such as the Sheila R. Veloz Breast Imaging Center and the Wound Care Center. Other community assets on campus include the College of the Canyons (COC)/Henry Mayo Education Center, a Community Cancer Program accredited by the American College of Surgeons, an active Volunteer Services, and an Education Department that provides continuing medical education to physicians, hospital staff, and other clinical professionals in the community.<sup>12</sup>

### **Santa Clarita Convalescent Hospital**

The Santa Clarita Convalescent Hospital, located in Newhall, is a 99-bed facility specializing in senior care. The hospital provides round-the-clock care and a full-range of activity programs, physical therapy, rehabilitation, restorative nursing, and dietary services.

### **Other Healthcare Facilities**

Facey Medical Group and Foundation operates five facilities within the OVOV Planning Area, with offices in Castaic, Santa Clarita, Valencia, and Canyon Country. In total, Facey employs more than 120 board-certified primary care and specialty physicians, and the group has been experiencing rapid expansion in recent years. In 2002, Facey acquired the assets of the Henry Mayo Newhall Family Medical Group and expanded its Castaic facility. The organization also opened a women’s center in Valencia in March 2003.<sup>13</sup>

Other medical groups close to the County’s Planning Area include First Care Walk-in Medical Group, with offices in Canyon Country and Saugus, Valencia Health Center in Valencia, Complete Care in Newhall, and the Canyon Walk-in Medical Center. Urgent care and industrial medicine services can be found at the following centers:

- Samuel Dixon Family Health Centers in Val Verde and Canyon Country;

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<sup>12</sup> City of Santa Clarita, Draft Henry Mayo Newhall Memorial Hospital Master Plan EIR, September 2008.

<sup>13</sup> <http://facey.com/events.php>

- Facey Urgent Care in Valencia; Facey in Canyon Country;
- SCV Quality Care in Valencia;
- The Doctor's Office in Newhall; and
- First Care Occupational Medical Group in Valencia, Industrial Medicine specialists.<sup>14</sup>

Most are open from 9:00 AM to 5:00 PM, seven days a week.

County residents also have access to a branch of the University of California, Los Angeles (UCLA) Jonsson Cancer Center, located in Valencia. This facility, which offers the latest in research and care, is open Monday through Friday, and has staff on call 24 hours a day, seven days a week. UCLA physicians see cancer patients on an outpatient basis at the Santa Clarita Cancer Center, but patients also have full access to the main UCLA facility. While UCLA patients are often treated at the HMNMH, the two facilities function independently.

County veterans must travel out of the County's Planning Area, to Wadsworth Hospital Center in West Los Angeles for medical services. However, veterans can also be seen at the Sepulveda Ambulatory Hospital at 16111 Plummer Street, North Hills, on an outpatient basis.<sup>15</sup>

### **Trauma Emergency**

The HMNMH is the designated regional trauma care facility for the OVOV Planning Area by the County of Los Angeles. This designation makes the hospital the primary respondent for trauma cases occurring in and around the Santa Clarita Valley. In order to maintain its status as a Level 2 regional trauma facility, the hospital must maintain a strict level of standards in staffing and equipment.

Los Angeles County is responsible for maintaining standards for the trauma system. Each of the 13 trauma centers in Los Angeles County has a contract with the County that covers policies and procedures for facilities, timeline standards, and patient care. The County also determines which facilities receive trauma designation based on ongoing evaluation of the geographic area, population, and need. Individual hospitals are under contractual obligation to maintain County standards that are largely determined by the California State Title 22 Regulations. These state trauma regulations are the minimum standard of care that the County must maintain.<sup>16</sup> While the trauma care needs of the OVOV Planning

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<sup>14</sup> Henry Mayo Newhall Memorial Hospital 2002

<sup>15</sup> Veterans Health Administration 2003

<sup>16</sup> California Code of Regulations, Title 22, Division 9, Chapter 7, Article 1, "Definitions." 2008.

Area are currently being met, future service is not assured. The HMNMH is the only trauma center in the OVOV Planning Area at this time.

### **Emergency Medical Services**

The provision of emergency medical services is divided between basic life support emergency medical technicians (EMT) and advanced life support (paramedics) within the OVOV Planning Area, and is overseen by the Los Angeles County Fire Department. All fire fighters are trained in basic life support as EMTs, while paramedic units provide advanced life support.

Although there are no official response time standards, the Fire Department follows specific dispatch protocol that determines response times and the priority of calls. There is approximately one paramedic unit servicing one-third of the fire stations in the OVOV Planning Area. The Fire Department makes a paramedic unit available for every emergency call; however, a basic life support unit usually arrives first and determines whether or not paramedics are needed. Because the Los Angeles County Fire Department does not have its own ambulance units to transport their patients, they also dispatch an ambulance to all emergency calls.<sup>17</sup> Emergency transportation services are provided by American Medical Response, which provides emergency medical response, and by Rescue Service International, based in Lancaster, which provides emergency rescue service to the Valley.<sup>18</sup>

### **Mental Health Services**

Mental health care is provided by a number of family counseling and mental health clinics and professionals, including those specializing in drug and alcohol abuse treatment, and biofeedback therapy and training.

Mental health treatment is available within the County's Planning Area at the Henry Mayo Newhall Memorial Hospital Psychiatric Unit, Santa Clarita Valley Special Education Local Planning Area Early Start, and the Child and Family Center. In addition, Los Angeles County will relocate the mental health facility located on Peachland Avenue, which burnt down in a fire in 2006, to 23501 Cinema Drive in Santa Clarita.

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<sup>17</sup> Henry Mayo Newhall Memorial Hospital 2002

<sup>18</sup> Christy Chacon, Operations Manager, Rescue Service International, 2003

## **Public Services and Programs**

The HMNMH's extensive community outreach programs include a Senior Program, which includes flu shots, colorectal cancer screenings, stroke screenings, diabetes screenings, pharmacy consults, and health education seminars. The Active Adults Outreach Program includes back pain consults, posture screenings and Alzheimer's Caregiver classes. Programs for parents and children include safety classes on snakes, toxic plants, spider bites, and general safety programs. And for teens, the hospital holds driving safety and drunk-driving awareness classes.

The HMNMH is involved in many community partnerships. One such partnership is the on-site nursing clinic held in collaboration with the College of the Canyons. The hospital is also in a partnership with the American Cancer Society that includes oncology clinical education for nurse staff, community outreach, and patient referrals. Henry Mayo has a community and nurse education program for Alzheimer's disease.

Various community groups and organizations outside of the major medical facilities also provide health and social services. The types of services provided for Santa Clarita Valley residents include AIDS/sexually transmitted diseases (STD) programs, counseling/mental health programs, drug/alcohol/tobacco treatments, disabled/special education/rehabilitation programs, pregnancy and parenting classes, and hotlines.

These services are provided by non-profit as well as for-profit groups in and around the County's Planning Area. These groups range in size and scope from local clinics to national organizations.

## **Funding**

Health and social service funding is obtained from a variety of sources, including, but not limited to the federal government; state and County governments; private donors; grants; insurance companies; and patients and their families. Funding is affected by changes in budget at all levels of government. Therefore funding levels can fluctuate from year to year, depending on the economy and or changes within the law. Providers are responsible for maintaining solvency according to their tax structures, and services can change in relation to the amounts of funding available.

Since long-term healthcare funding is not assured, trauma center funding is also at risk. There is no stable source of funding, which is of concern to health care providers. Because of the high costs for hospitals to maintain the expertise and level of care mandated by the state and County, many trauma centers have



closed due to lack of funding over the past 20 years. (The number of trauma centers in Los Angeles County has been reduced from 20 to 13).

State funding for trauma centers is not guaranteed. If a center receives any funding from the state, the number of trauma patients served determines the amount of funding received. While the funding crisis has received more attention in recent years, funding cutbacks continue.

## **Regulatory Context**

Medical Services are addressed through the efforts of various government agencies and private agencies. These agencies work jointly, as well as individually, to provide and improve medical services of particular areas through legislation, regulations, planning, policy making, education, and a variety of other programs.

### ***Federal Regulations***

#### **OSHA - Safety and Health Regulations**

The US Department of Labor Occupational Safety and Health Administration (OSHA) sets forth rules and regulations regarding construction workers well-being and safety within Part 1926 of the OSHA Regulations.<sup>19</sup> These regulations include the use of safety programs and awareness of safety issues on construction sites.

### ***State Regulations***

#### **Cal OSHA – Title 8, Chapter 4 Division of Industrial Safety, Subchapter 4 Construction Safety Orders**

The California Department of Occupational Safety and Health Administration (Cal OSHA) has set forth rules and regulations regarding construction workers' well-being and safety.<sup>20</sup> These regulations include the use of safety programs and awareness of safety issues on construction sites.

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<sup>19</sup> 29 C.F.R. Sec. 1926.

<sup>20</sup> California Occupational Safety and Health Administration, Title 8, Chapter 4 Division of Industrial Safety, Subchapter 4 Construction Safety Orders.

## *Local Regulations*

### **Los Angeles County Public Health Code**

Part 2 of Chapter 11.02 and Chapters 11.06 through 11.38<sup>21</sup> of this title are intended to supplement the provisions of the laws and regulations of the state of California by prescribing higher standards of sanitation, health, and safety. Whenever any technical words or phrases are not defined herein, but are defined in such laws and regulations of the state, such definitions are incorporated in this part and shall be deemed to apply as though set forth herein in full.

### **Thresholds of Significance**

In order to assist in determining whether a project will have a significant effect on the environment, the 2008 *State CEQA Guidelines*, Appendix G, identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- A significant impact will occur if future population growth from the implementation of the Area Plan will increase demand for health and social services beyond the adequate capacities of those serving the County's Planning Area.

### **Impact Analysis**

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on health services within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-2                    A potentially significant impact will occur if future population growth from the implementation of the Area Plan will increase demand for health and social services beyond the adequate capacities of those serving the County Planning Area.**

Implementation of the County's proposed Area Plan would result in a buildout population of 237,387 residents. The fastest growing segment of the County's population is the age group 50 and older. If current trends persist then the annual growth rate for residents over age 60, from 2008 to buildout, would be 5.2 percent.<sup>22</sup> The 2008 residents, age 65 and over, is 10.2 percent of the County's Planning Area population, or about 7,650 people. As the population for the age residents over 65 increases through build out of the County's Planning Area, then 36,557 people, at 15.4 percent of the population, would be age

<sup>21</sup> Los Angeles Municipal Code. Section 11.02.150. "Purpose of provisions."

<sup>22</sup> Los Angeles County Community and Senior Services, *L.A. County Seniors Count*, 2008.

65 or older. Current technology allows for longer life, which means that the age group of 65 or older will have the potential to live longer. As the population ages, the greatest medical need in the area will be long-term care with hospitals in the area potentially facing the ongoing challenge of securing funding. As of 2008, the HMNMH has received City of Santa Clarita approval to expand its facilities to better meet the needs of the OVOV Planning Area residents. Funding is a major factor in determining if the medical resources of the County's Planning Area are met. Based on the County's existing medical facilities, the increase in residents would require new facility construction or large-scale expansion of existing facilities to accommodate the additional beds required to treat and provide medical services to the growing area (**Policy LU 8.1.7**). The use of the proposed land use designations, such as Public Facility, within the County's Planning Area would also provide areas for the potential development of additional medical facilities and/or health care facilities.

### ***Proposed Area Plan policies***

**Policy LU 8.1.7:** Work with medical service providers to facilitate preservation and enhancement of health services, including the Santa Clarita Valley's trauma center, provided applications are in conformance with applicable Area Plan policies and environmental requirements.

### ***Effectiveness of the proposed Area Plan Policies***

The proposed Area Plan policy focuses on the County's ability to provide adequate medical facilities and services.

### **Plan to Plan**

Since the buildout population of 270,000 under the existing Area Plan would be greater than the buildout population of 237,387 under the proposed Area Plan, the County's health and social services needs at buildout under the existing Plan would be greater. As of 2007, 10.2 percent of the population consisted of the age group 65 or older. If trends stay the same then, at buildout, 41,580 people, or 15.4 percent, of the projected 270,000 residents would be age 65 or older. The proposed Area Plan would total 36,577 people age 65 and over. Every age group of the projected population would require adequate health care within the County's Planning Area, not just newborns and the elderly. Therefore, impacts on health services would be greater under the existing Area Plan than those of the proposed Area Plan.

## Mitigation Framework

No mitigation is required.

## Significance of Impact with Mitigation Framework

Implementation of the above Area Plan policies would reduce any potentially significant impacts on health and social services to less than significant.

## EDUCATION

### Summary

This section describes existing school systems, facilities, and enrollment for the County's Planning Area and discusses current local and regional policy regarding new school development. The school districts within the County's Planning Area contain five over-capacity schools with the total capacity for the County's Planning Area at 91.1 percent. Impacts on the existing school systems, facilities, and enrollment would be less than significant with the incorporation of the proposed Area Plan policies.

### Existing Conditions

#### *Public Schools Facilities*

Six public school districts serve the Santa Clarita Valley Planning Area:

- Action-Agua Dulce Unified School District
- Castaic Union School District
- Newhall Elementary School District
- Saugus Union Elementary School District
- Sulphur Springs Union Elementary School District
- William S. Hart Union High School District

These local public school districts provide 17 schools including 14 elementary schools; two junior high schools and one high school.

### ***Public School Enrollment***

The California Department of Education determined the number of students enrolled within the County's Planning Area. **Table 3.15-4, County's Planning Area Public School Enrollment 2007–2008** lists the enrollment figures for each school along with the permanent design capacity numbers and percent of capacity.

Permanent design capacity refers to the total number of students planned for enrollment that can be accommodated by classroom structures at a particular school site. Percent of capacity indicates the division of real enrollment by the planned enrollment, with 100 percent capacity representing enrollment and capacity that are equivalent.

**Table 3.15-4  
County's Planning Area Public School Enrollment 2007–2008**

<b>District/School</b>	<b>CA Dept. of Education Enrollment Numbers</b>	<b>Current Design Capacity</b>	<b>Percent of Capacity (%)</b>
<b>Acton-Agua Dulce Unified School District*</b>			
Agua Dulce Elementary	308	353	87.3
<b>Subtotal</b>	<b>308</b>	<b>353</b>	<b>87.3</b>
<b>Castaic Union School* District</b>			
Castaic Elementary	765	750	102
Castaic Middle School	1,176	1,434	82.0
Live Oak Elementary	741	750	98.8
Northlake Elementary	715	750	95.3
<b>Subtotal</b>	<b>3,397</b>	<b>3,684</b>	<b>92.2</b>
<b>Newhall Elementary*:1 School District</b>			
McGrath Elementary	644	720	89.4
Oak Hills Elementary	562	984	57.1
Pico Canyon Elementary	939	912	103
Stevenson Ranch Elementary	991	960	103
Wiley Canyon Elementary	758	864	87.7
<b>Subtotal</b>	<b>3,894</b>	<b>4,440</b>	<b>87.7</b>

District/School	CA Dept. of Education Enrollment Numbers	Current Design Capacity	Percent of Capacity (%)
<b>Saugus Union Elementary School District*;<sup>2</sup></b>			
Tesoro del Valle Elementary	571	675	84.6
<b>Subtotal</b>	<b>571</b>	<b>675</b>	<b>84.6</b>
<b>Sulphur Springs Union*;<sup>3</sup> Elementary School District</b>			
Fair Oaks Elementary	891	750	119
Golden Oak Elementary	388	500	77.6
Mint Canyon Elementary	489	750	65.2
Sulphur Springs Elementary	708	750	94.4
<b>Subtotal</b>	<b>2,476</b>	<b>2,750</b>	<b>90.0</b>
<b>William S. Hart Union*;<sup>4</sup> High School District</b>			
Rancho Pico Junior High	997	1,200	83.1
West Ranch High	2,656	2,600	102
<b>Subtotal</b>	<b>3,653</b>	<b>3,800</b>	<b>96.1</b>
<b>TOTAL</b>	<b>14,299</b>	<b>15,702</b>	<b>91.1</b>

<sup>1</sup> Information from a telephone communication between Mike Clear, Asst. Superintendent to Business Services, and Chris Hampson, Staff Planner Impact Sciences, Inc. on 8/5/2008.

<sup>2</sup> Information via electronic communication between Harold Pierre, Director of Facilities Services, and Chris Hampson, Staff Planner Impact Sciences, Inc. on 8/25/08.

<sup>3</sup> Information via email from Carol Greenwood, Administrative Secretary, Business Services Sulphur Springs School District, 10/13/2008

<sup>4</sup> Current information per electronic communication between Pat Willett, Community Liaison Officer, and Chris Hampson, Staff Planner of Impact Sciences, Inc., on 8/19/2008.

\* For purposes of this **Table 3.15-4**; the schools listed are those located within the unincorporated areas of the County of Los Angeles.

There are significant distinctions in the way that the County/City and the school districts define growth. These differences are significant because they may result in insufficient school facilities to meet the needs of a growing student population. In their definition of growth, school districts generally do not account for increases in household size that occur independently of projected population numbers that are the result of new development.<sup>23</sup> The County/City defines growth as new and expanding development, whereas the school districts define growth as a change in demographics that leads to higher enrollment.

<sup>23</sup> Anne Browning McIntosh. Mayor's Committee on Managed Growth for a Quality Community. March 2001.

While higher enrollment levels may result from new physical development, they are often the result of an increased birth rate and young families moving into existing housing stock. Thus, school districts would still experience growth even if there were no further physical development.

### Enrollment Capacity

The number of additional students that may be generated by any given development project is determined by the number and type of residential units to be developed. The number of students that would be generated by each new housing unit is referred to as the “student generation rate.” Student generation rates are largely calculated by categorizing the existing number of students within the particular school district by the type of home in which they live (single family, multi-family, and apartment), and then dividing the total number of students in each category by the total number of homes of each type. The school districts use student generation tables based on rates developed for existing development patterns in the County’s Planning Area. The student generation standards are summarized in **Table 3.15-5, Student Generation Rates**. The student generation rates would be used on a project-by-project basis to determine if new schools would be needed.

**Table 3.15-5  
Student Generation Rates**

School District	Single-Family Development	Family Home***	
		Multi-Family Development	Apartment
Newhall Elementary	0.60	N/A	N/A
Saugus Union Elementary	0.4329** 0.1279*	0.0884	N/A
Castaic Union	0.506	0.134	N/A
Sulphur Springs Union Elementary	0.336	0.336	N/A
Acton-Agua Dulce Unified	0.702	N/A	N/A
William S. Hart Union High School (Junior High School)	0.1280** 0.0387*	0.0196	N/A
William S. Hart Union High School (High School)	0.2246** 0.0768*	0.0367	N/A

\* Single-Family attached

\*\* Single-Family detached

\*\*\* Student generation rates are largely calculated by categorizing the existing number of students within the particular school district by the type of home in which they live (single family, multi-family, and apartment), and then dividing the total number of students in each category by the total number of homes of each type.

Source:

William S. Hart UHSD data received via telephone communication between Lorna Baril, Developer Fees, and Chris Hampson, Staff Planner Impact Sciences, Inc. on 8/25/08.

Given the existing overcrowding of public schools in the County's Planning Area, anticipated growth, and competing land use interests between schools and other public facilities, opportunities to share resources are being explored. Examples include mixed-use facilities, such as cafeteria-auditorium multiple purpose rooms; shared library facilities; joint-use of technological resources between schools and/or between schools and the community; and shared recreational facilities between parks and schools. In addition, in an effort to relieve overcrowding, some schools are utilizing year-round academic calendars.

### ***Standards***

No single standard for the size of school sites exists for California educational facilities. The rule-of-thumb approach used for the past several decades recommended a minimum 10 net usable acres for elementary schools, 25 acres for middle schools and 35–40 acres for high schools.<sup>24</sup> Many of the existing schools in the County's Planning Area are below this standard. Further exacerbating the limited site acreage is the addition of portable classrooms to alleviate overcrowding, which results in reduced playground space at many sites.<sup>25</sup>

As land constraints and evolving educational needs have necessitated revisions to these standards, the California Department of Education has published *The Guide to School Site Analysis and Development* in order to establish a valid technique for determining acreage for new school formulas that permit each district to accommodate its individual conditions. The Department of Education recommends that a site utilization study be prepared for a potential site, based on these formulas.

### ***Private and Post-Secondary Education***

The Santa Clarita Valley includes 11 private schools, 2 private colleges, and a public community college. The private schools include:

- Pinecrest Schools (Valencia and Canyon Country locations)
- Northpark Christian Academy
- St. Stephens Preschool
- Our Lady of Perpetual Help

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<sup>24</sup> California Department of Education.

<sup>25</sup> Saugus School District 2002



- Legacy Christian Academy
- Santa Clarita Christian School
- Sierra Montessori Preschool
- Trinity Classical Academy
- Monticello Preparatory School
- Mission View Public School

Adult education facilities include the Golden Oak Adult School and the Learning Post. The three colleges in the Santa Clarita Valley offer two- to four-year degree programs and include:

- California Institute of the Arts (CalArts)
- The Master's College
- College of the Canyons (Community College)

### **College of the Canyons**

The College of the Canyons, located on 158 acres in Valencia, is part of the California Community College System and is fully accredited, offering a variety of two-year degree programs in academic and technical fields. The College is a fast-growing community college. Over the past decade, expansion plans for the school have included classrooms, a library, a computer center, a fine arts building, a 950-seat performing arts theater, an administration building, a small gymnasium, and other recreational facilities. Existing classrooms and laboratories have been remodeled.

### **California Institute of the Arts**

CalArts is the nation's only fully accredited visual and performing arts college. Formed by the Walt Disney Company through a partnership with the Los Angeles Conservatory of Music and the Chouinard Art Institute, the campus is located on a 60-acre site in Valencia. As of fall 2006/2007, CalArts had an enrollment of 1,242 students.

The CalArts campus includes the artistic/academic building; the Eli and Edythe Broad graduate art studios; several annexes that house facilities for art, critical studies, film/video, and theater; a residence hall; and student apartments. The artistic/academic complex, a five-level, multi-winged building of

500,000 square feet, contains classrooms; art studios; electronic music studios; dance spaces; rehearsal rooms; theaters; costume, scenery and machine shops; galleries; photo labs; editing rooms; sound and video stages; a library; a cafeteria; and offices. The Chouinard Residence Hall and Ahmanson Apartments house a total of 450 students. CalArts has a film and entertainment focus and animation training program.

### The Master's College

The Master's College is a private liberal arts college. It is located on over 100 acres in Placerita Canyon. The college consists of 30 buildings and approximately 264,165 square feet of usable building space. The Master's College offers over 50 bachelor of arts (BA) and bachelor of science (BS) degrees for liberal arts majors. Future plans for expansion have been limited with the maximum enrollment set at 1,700 students, including full and part-time students. Enrollment and building data for all three schools is listed in **Table 3.15-6, College Facilities**.

**Table 3.15-6  
College Facilities**

School	Campus and Enrollment
College of the Canyons	Main Campus Buildings: 472,454 assigned square feet Enrollment: Fall 2007: 21,300 Projected 2015: 27,000 Canyon Country satellite location 4,500 square feet
The Master's College	Buildings: 264,165 assigned square feet Enrollment: 2006/07: 1,000
California Institute of the Arts	Buildings: 667,000 assigned square feet Enrollment: 2006/07: 1,242

*Source:*

*College of the Canyons Website <http://www.canyons.edu/Offices/PIO/Resources/FactBook2008rev1.pdf>; The Master's College Website [www.masters.edu](http://www.masters.edu); California Institute of the Arts Website <http://www.calarts.edu>. (Accessed 2008).*

### Programs

The six public elementary, intermediate, and high school districts provide traditional curriculum education, as well as programs for special students.

In addition to services offered by the public schools, the Santa Clarita Chamber of Commerce supports programs in a partnership with private businesses. These programs include a Business Education Partnership for junior high school students, the annual Santa Clarita Valley Teacher Tribute honoring local educators, and a scholarship program for high school students.

### ***Funding***

Funding mechanisms to support new construction and expansion of public elementary, intermediate, and high school facilities are provided by various state and local sources.

#### **Local Sources**

Local funding sources include both non-revenue and revenue monies. Non-revenue funds include lease/purchases, certificates of participation, and other mechanisms, which are typically loans. Revenue funds are generated from several sources, including the district's general fund, money from the sale of unused school sites, general obligation funds, redevelopment agreement funds, developer fees, and others.

After land is acquired, school districts are exempt from local zoning regulations and planning processes. But the construction of new schools, like all development, is dependent upon multiple factors, including various funding sources. Without County and/or City support, the attainment of funding in and of itself does not guarantee the construction of schools. Increases in the tax base do not necessarily affect the financial status of the school districts; therefore, a strong local economy does not necessarily mean that more school facilities can be built and that programs can be expanded.<sup>26</sup>

#### **Developer Fees**

Developer fees<sup>27</sup> are another source of funding available to districts. Developer Fee Justification Studies are prepared for each individual school district under the requirement of state law and provide specific fee amounts to be paid, as part of the development process, for the purpose of school funding. The reports provide justification for continuing to collect residential and commercial/industrial development fees, in accordance with state law. All local school districts in the County's Planning Area have adopted fee-justification studies. However, developer fees do not ensure the construction of new schools. School fees paid by developers are not spent on future demand, but on existing demand of a specific project.

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<sup>26</sup> McIntosh, Santa Clarita Valley Technical Background Report, 2001.

<sup>27</sup> California Government Code. Section 65971.

## Regulatory Context

### *State Regulations*

#### **Assembly Bill 2926**

The State of California has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the state passed Assembly Bill 2926 (AB 2926) in 1986. This bill allows school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

#### **Senate Bill 50**

Senate Bill 50 (SB 50) and Proposition 1A (both of which passed in 1998) provided a comprehensive school facilities financing and reform program by, among other methods, authorizing a \$9.2 billion school facilities bond issue, school construction cost containment revisions, and an eight-year suspension of the Mira, Hart, and Murrieta court cases. Specifically, the bond funds are to provide \$2.9 billion for new construction and \$2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate and reinstate the school facility fee cap for legislative actions (e.g., general plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart, and Murrieta court cases. According to Government Code Section 65996, the development fees authorized by SB 50 are deemed to be “full and complete school facilities mitigation.” These provisions are in effect until 2012<sup>28</sup> and will remain in place as long as subsequent state bonds are approved and available.

SB 50 establishes three levels of developer fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. These three levels are described below:

- Level 1: Level 1 fees are the base statutory fees. These amounts are the maximum that can be legally imposed upon new development projects by a school district unless the district qualifies for a higher level of funding.

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<sup>28</sup> <http://law.onecle.com/california/government/65997.html>

- Level 2: Level 2 fees allow the school district to impose developer fees above the statutory levels, up to 50 percent of certain costs under designated circumstances. The state would match the 50 percent funding if funds are available. Under Level 2, the governing board of a school district may require a developer to finance up to 50 percent of new school construction costs. However, in order to qualify for Level 2 funding the district must satisfy at least one of the following four requirements until January 1, 2000, or satisfy at least two of the four requirements after January 1, 2000:

Impose a Multi Track Year Round Education (MTYRE) with:

- at least 30 percent of K–6 enrollment in the high school attendance area on MTYRE for unified and elementary school districts;
  - or at least 30 percent of high school district enrollment on MTYRE; or
  - at least 40 percent of K-12 enrollment on MTYRE within boundaries of the high school attendance area for which the district is applying for funding;
  - place a local bond measure on the ballot in the last four years which received at least 50 percent plus 1 of the votes;
  - District has issued debt or incurred obligations for capital outlay equal to a specified [under Government Code 65995.5(b)(3)(C)] percentage of its local bonding capacity;
  - at least 20 percent of teaching stations within the district are portable classrooms.
- Level 3: Level 3 fees apply if the state runs out of bond funds after 2006, allowing the school district to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school moneys.

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions (e.g., the Valley-Wide Joint Fee Resolution) and/or agreements between developers, the affected school districts and, occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

## ***Local Regulations***

### **Valley-Wide Joint Fee Resolution**

To accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts and, occasionally, other local governmental agencies. This special resolution often allows school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50. The County and the City are signatories to the Valley-Wide Joint Fee Resolution.

## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- a significant impact to school facilities will occur if build out of the proposed Area Plan will increase demand for school facilities and services beyond the enrollment capacities of school facilities serving the County's Planning Area.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on school facilities within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-3                      A significant impact to school facilities will occur if buildout of the proposed Area Plan will increase demand for school facilities and services beyond the enrollment capacities of school facilities serving the County's Planning Area.**

Most school districts either cannot meet their current need or will be unable to meet future needs resulting from projected growth. The County's Planning Area currently has six school districts located within the area, with school jurisdictions extending to both the County and City Planning Areas, and they include Acton-Agua Dulce Unified School District, Newhall Elementary, Saugus Union Elementary, Castaic Union, Sulphur Springs Union Elementary, and William S. Hart Union High School. The population of the County's Planning Area is 75,000, as of 2008, and the projected population is 237,387 at build out of the proposed Area Plan. As stated previously, there are currently five schools over design capacity with the total capacity for the County's Planning Area at 91.1 percent (**Table 3.15-4**). The school system and facilities are approaching design capacity; expansion of these facilities will be required to accommodate the County's planned growth. As described in (**Table 3.15-5**), the school districts have student generation rates for different types of residential dwellings.

Although the State of California has developed recommended guidelines for school site acreages based on population, the planning process presents the opportunity to examine whether school size and demand is consistent with or differs from those standards that have been identified. Local school districts typically use school generation rates and multiply those with projected population numbers for their jurisdiction. The result is a projected number of students per residential development type proposed, such as single-family or multi-family uses. The private schools and the colleges, both community and

private, are dependent on the State of California and private funds for the development, enhancement, and expansion of facilities and services provided.

As necessary, the price per square foot for development of commercial, residential, or industrial uses will be updated to reflect the affected school district. The school district, developer and the County will determine if any mitigation measures will be necessary on a case-by-case basis (**Policy LU 8.1.1**) to provide the necessary upgrades or new additions to accommodate the projected needs of the County's Planning Area.

### ***Proposed Area Plan Policies***

**Policy LU 8.1.1:** Coordinate plans for new residential development with affected school districts to ensure adequate mitigation of impacts on school facilities; provision of facilities and programs to promote academic excellence for Santa Clarita Valley students; coordination on joint use of facilities and transportation; and long-range planning.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed Area Plan policy addresses the need to ensure that school districts meet enrollment capacity through long-range planning, but the policy does not protect the school districts within the County's Planning Area from the increase in school children anticipated with the County's buildout. As discussed below, state law limits the power of the County to impose mitigation for development impacts on schools.

### **Plan to Plan**

The County's Planning Area currently has six school districts and, as of 2008, educates 14,299 students from kindergarten to grade 12. The school districts' design capacity is 15,702 students. No school districts are over capacity; however there are five schools over capacity. Implementation of the existing Area Plan, as well as the proposed Area Plan, would potentially increase the number of new students within the County's Planning Area. The number of projected students is determined using a student generation rate, which is based on the number and type of dwelling units (i.e., single-family detached). As this is a programmatic EIR, the number and types of dwelling units are not provided and therefore, the number of new schools needed at buildout of the County's Planning Area would be conducted on a project-by-project basis. Impacts from implementation of the existing Area Plan would be comparable to that of the proposed Area Plan.

## Mitigation Framework

No mitigation measures are required.

## Significance of Impact with Mitigation Framework

SB 50 states that the exclusive method of mitigating the impact of school facilities according to CEQA is to pay the maximum school fees and that such fees are "deemed to provide full and complete school facilities mitigation" related to the adequacy of school facilities when considering the approval or the establishment of conditions for the approval of a development project.<sup>29</sup> Because the Government Code states that compliance with SB 50 will provide full and complete mitigation, no significant impact would occur.

## EMERGENCY SERVICES AND WILDLAND FIRE PROTECTION

### Summary

This section provides information on the existing fire and emergency services in the County's Planning Area. The current staffing, equipment, response times, and standards of these services are described along with their ability to meet the needs of the County's Planning Area. Both urban and wildland fire protection are discussed. The 2008 median response time for the OVOV Planning Area was 5 minutes and 42 seconds. The standard response time for Los Angeles County Fire Department is 5 minutes or less for urban areas, 8 minutes or less for suburban areas, and 12 minutes or less for rural areas. Impacts on fire protection within the County's Planning Area were less than significant with the incorporation of the proposed Area Plan policies and the implementation of mitigation measures **MM 3.15-2** and **MM 3.15-3**.

### Existing Conditions

#### *Urban Fire Protection*

##### Provider and Facilities

As part of the Consolidated Fire Protection District, the County's Planning Area receives urban and wildland fire suppression service from the Los Angeles County Fire Department (LACoFD). Mutual aid or assistance pacts are maintained with several local, state, and federal agencies. As of 2009 there are 13 fire stations with 11 engine companies, one assessment engine, five paramedic squads, one hazardous materials squad, and two ladder trucks serving the County's Planning Area, **Table 3.15-7, Fire Station**

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<sup>29</sup> California Government Code. Section 65996 (a) and (b). 2008.



**Facilities.** A nine-person hazardous materials Task Force operates out of Station 76. Approximately 64 firefighters are on duty every day, 24 hours a day (not including chief officers and fire prevention staff). There are currently three temporary fire stations and the County is proceeding to build an additional two fire stations, as well as replace the three temporary fire stations, within the OVOV Planning Area in the next two years. It is expected that by 2016, 15 new fire stations will be operational. In 2008, the Department completed the construction of Fire Station #108 on Rock Canyon,<sup>30</sup> and has established temporary Stations #156 on Copperhill, #132 on Sand Canyon, and #104 on Golden Valley. The locations of the fire stations are depicted in **Figure 3.15-2, Fire Station Locations within the OVOV Planning Area.**

Aside from the personnel and equipment listed above, the LACoFD has additional resources available to provide back-up services to the County's Planning Area as needed, including additional engine companies, truck companies, paramedic squads, hazardous material squads, firefighting helicopters, other fire camps, and a variety of specialty equipment.

**Table 3.15-7  
Fire Station Facilities**

<b>Station</b>	<b>Location</b>
Fire Station 73*	24875 N. San Fernando Road Santa Clarita, California 91321
Fire Station 76	27223 Henry Mayo Drive Valencia, California 91355
Fire Station 81	8710 W. Sierra Highway Agua Dulce, California 91350
Fire Station 104 (Temporary)	26201 Golden Valley Rd Santa Clarita, California 91350
Fire Station 107*	18239 W. Soledad Canyon Santa Clarita, California 91351
Fire Station 108 (New station opened 11/1/2008)	28799 N. Rock Canyon Drive Santa Clarita, CA 91390
Fire Station 111*	26829 Seco Canyon Road Saugus, California 91350
Fire Station 123	26321 N. Sand Canyon Road Santa Clarita, California 91387
Fire Station 124*	25870 Hemingway Avenue Stevenson Ranch, California 91381

<sup>30</sup> Los Angeles County Fire Department, "Hometown Fire Stations," <http://www.fire.lacounty.gov/HometownFireStations/HometownFireStations.asp>, 2009.

Station	Location
Fire Station 126	26320 Citrus Street Santa Clarita, California 91355
Fire Station 132 (Temporary)	29310 Sand Canyon Rd Santa Clarita, California 91387
Fire Station 149*	31770 Ridge Route Castaic, California 91384
Fire Station 156 (Temporary)	24525 W. Copper Hill Dr. Santa Clarita, California 91350

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\* = Paramedic Units

Source: LACoFD 2008

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### Volume of Calls

In 2007, LAFCoFD stations in the OVOV Planning Area responded to 15,396 calls within the Planning Area, of which 591 were fire and 10,097 were emergency medical services, **Table 3.15-8, Fire Incidents**. The Fire Department also responded to 10 hazardous materials calls, including reports of hazardous conditions. The 2008 median response times throughout the OVOV's Planning Area were 5 minutes 42 seconds. Department goals for response times:

- Urban: 5.0 minutes or less
- Suburban: 8.0 minutes or less
- Rural: 12.0 minutes or less
- Rural: 12 minutes or less

However, actual response times vary due to distances and road conditions.

**Table 3.15-8  
Fire Incidents**

<b>Incident Type</b>	<b>County's Planning Area</b>	<b>OVOV Planning Area</b>
Fire	315	591
Emergency Medical Services	7,214	10,097
Other	2,904	4,708
Total	10,433	15,396

*Source: Letter from LACoFD. 2008.*

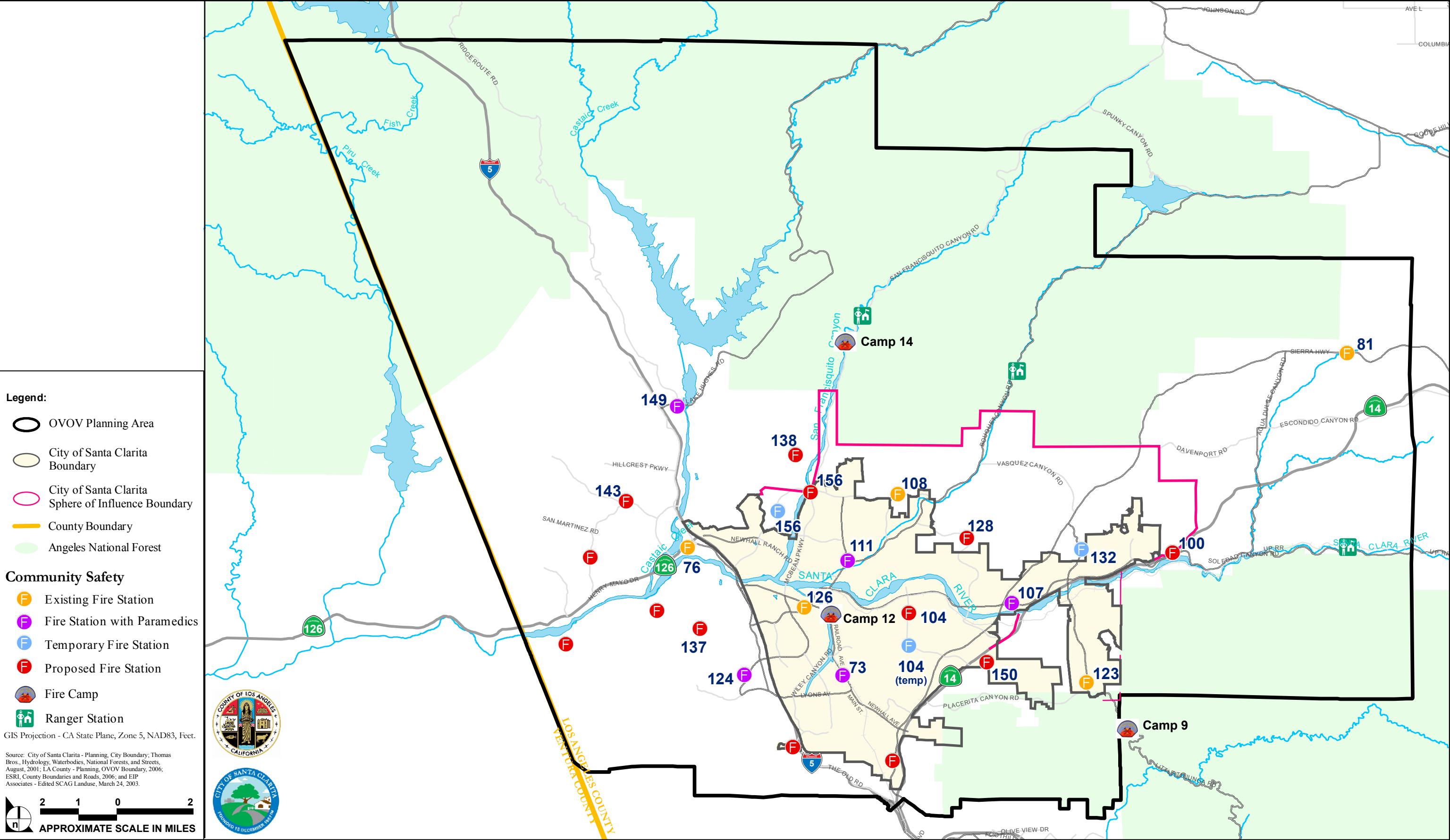
## **Services**

In addition to fire suppression, the LACoFD also provides fire prevention services, emergency medical services (EMS), hazardous materials services, and urban search and rescue (USAR) services.

### ***Fire Prevention***

One of the major focuses of the LACoFD is fire prevention, which is headed up by the Fire Marshal. As of January 1, 2008, fire prevention services offered by LACoFD's Fire Prevention Bureau include:

- A Codes and Ordinances Unit that participates in updating codes to the latest standards;
- Fire Prevention Engineering that assists in plan checking, particularly for fire sprinkler installation and fire alarm plans;
- Inspections of occupancies (except one and two-family dwellings);
- Forestry services that includes a Brush Clearance Compliance Program and a Fuel Modification Program;
- Special Units Section that includes a Petroleum/Chemical Unit, Schools and Institutions Unit, and Fire Investigation Unit;
- Water, Subdivision and Access Unit that reviews development impact issues;
- Area Sections Unit to inspect and plan check specific buildings/structures; and
- Environmental review.



SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2008

FIGURE 3.15-2

Fire Station Locations within the OVOV Planning Area

### ***Emergency Medical Services (EMS)***

EMS, a second major activity area of the LACoFD, was established in 1969. This service allows paramedics to go straight to a medical call and, if necessary, implement advance life support while being able to contact a nurse at a hospital over a specially designed radio system. Aside from EMS provided by the LACoFD, there is also a private ambulance service in the Planning Area.

### ***Hazardous Materials***

Another significant activity of the LACoFD is hazardous materials. The mission of this division is “to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation and disposal of hazardous materials and waters through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight.” Further details regarding hazardous materials management in the County’s Planning Area are addressed in **Section 3.11** of this EIR.

### ***Urban Search and Rescue (USAR)***

The USAR service, an activity that requires special training and equipment, allows the LACoFD to offer advanced technical rescue capabilities during disasters. Members of the USAR Committee, which consists of LACoFD personnel certified as California state instructors for Rescue Systems I and Emergency Trench Rescue, are trained in confined space rescue, high angle rescue, the use of Biopack self-contained breathing apparatuses (SCBAs), helicopter rescue, rescue diving, and other specialties.

### **Fire Service Funding**

The LACoFD Fire District provides fire protection and emergency medical services to the County. The majority of funding for fire services is obtained through property taxes. Additionally, voters in the Fire District approved a special tax in 1997 to pay for essential fire suppression and emergency medical services. The special tax is billed on the Joint Consolidated Annual Tax Bill under Detail of Taxes Due, Direct Assessments. The most common rates are single-family residence—\$49.93; multiple-family residence—\$63.07 + \$0.0064 per square foot; and commercial/industrial—\$60.43 + \$0.0407 per square foot.

### **Emergency Preparedness**

The County of Los Angeles and the City of Santa Clarita both implement programs to facilitate emergency preparedness. The County has an Operational Area Emergency Response Plan, which describes the planned response to emergencies associated with natural and man-made disasters and

technological incidents. The City has a Standardized Emergency Management System Multihazard Functional Plan, as discussed above. Both plans provide an overview of operational concepts, identify components of the County's and City's Emergency Management Organization within the Standardized Emergency Management System, and describe the overall responsibilities of the federal, state, and local agencies for protecting life and property and assuring the overall well-being of the population.

Additionally, the Santa Clarita Valley implements the Community Emergency Response Training (CERT) program, which is designed to help the community to prepare for effective disaster/emergency response through training and preplanning. The Santa Clarita Educated Communities United in Response to Emergencies (SECURE) trains the community members to be prepared in the event of major disasters such as earthquakes, floods, fires, transportation accidents, and hazardous materials exposure. Furthermore, the Santa Clarita Emergency Communications Team, a local chapter of the Los Angeles County Disaster Communication Service, is available within the County's Planning Area to assist in the event of an emergency. The team's primary purpose is to supply emergency communications to the Los Angeles County Sheriff's Department and the County. **Section 3.11, Hazards and Hazardous Materials**, provides further detail about emergency preparedness.

### **Wildland Fire Protection**

The County's Planning Area is susceptible to wildland fires because of its hilly terrain, dry weather conditions, and the nature of its plant cover. Steep slopes in the County's Planning Area allow for the quick spread of flames during fires and pose difficulty for fire suppression due to access problems for firefighting equipment. According to the LACoFD, approximately 80 to 90 percent of the County's Planning Area is in a Very High Fire Hazard Severity Zone, which is the department's highest classification for areas prone to wildfires. The potential wildland fire hazard areas within the County are referenced in **Section 3.11, Hazards and Hazardous Materials**, and seen in **Figure 3.11-2, Wildfire Hazards Zone within the OVOV Planning Area**. Within Los Angeles County, the LACoFD currently operates 10 fire suppression camps assigned to the Air and Wildland Division. Crew resources can be utilized for fire protection/prevention and suppression activities. The fire crews provide manpower and tools to cut a control line around the perimeter of the fire. The crews coordinate their efforts with bulldozers, water-dropping helicopters, and fixed wing aircraft.

### **Service Providers**

As mentioned previously, fire suppression responsibility in the County's Planning Area primarily belongs to LACoFD, which by contract serves all state lands in Los Angeles County. The Angeles

National Forest, which is federal land that encompasses portions of the County's Planning Area, receives seasonal service from the US Forest Service (USFS). There are three USFS ranger stations located in the County's Planning Area (**Figure 3.15-2**). Fire suppression responsibility in the nearby Santa Monica Mountains National Recreation Area has been contracted by USFS to LACoFD.

Under a mutual aid pact covering federal forestlands, responsibility for non-structure fires within the national forest belong to the USFS, while LACoFD has the primary mission of suppressing structure fires. Although these responsibilities are stated in the mutual aid pact, each agency fights both wild and structure fires in actual fire emergencies. In addition, an automatic aid agreement, which is an agreement that allows the closest municipality to provide an initial response to fires that may occur in a part of another municipality, exists between USFS and LACoFD. Firefighting, however, is not the primary function of USFS, and the agency is on duty at only certain times of the day. As a result, LACoFD would be called upon to provide fire service if fires involving structures or brushlands near the forest boundary occur after USFS's hours of service.

### ***History of Wildland Fires***

Records from the US Department of Forestry reveal that wildland fires occur on a regular basis almost every year, while large fires occur fairly regularly every 10 years. The occurrence of major wildfires in a particular region corresponds to the age of its vegetation. Often, renewed growth of vegetation after a major fire tends to pose a lesser risk during the first 10 years of growth. However, as dead vegetation accumulates, the potential for a major wildfire increases as these materials are more susceptible to ignition and facilitate the spreading of flames. Therefore, the occurrence of wildland fires tends to be cyclical, where a decade will pass with few fires followed by a decade with several large fires. In addition, the occurrence of the largest fires also corresponds to periods of extremely high wind conditions. Major wildland fires that occurred in the County's Planning Area since 2000 are mentioned in **Section 3.11, Hazards and Hazardous Materials**.

### ***Programs***

One of the focal points of LACoFD programs is emergency preparedness. Each year, LACoFD sponsors numerous events, including Community Emergency Response Team, Burn Awareness, and North County Brush Clearance in the County to provide residents with the knowledge base for safe fire protection strategies and tips on emergency preparedness. In addition, the LACoFD also provides programs to educate youth about fire safety as well as helping to promote healthy communities. Some of the current youth programs offered by the LACoFD to the community include the following:

- Junior Fire Chiefs – Promoting fire safety to elementary school youths.

- Rescue Youth – LACoFD joining with the District Attorney to assist “at risk” youths.
- Explorers – LACoFD’s explorer program in association with the Boy Scouts of America for young adults interested in a career in Fire Service.
- WATCH (Water Awareness Training for Children in the Home) – A five-step program for poolside safety.
- Spark of Love – Firefighters interacting with the community to bring the spirit of togetherness.
- Yogi Bear Schoolhouse – Using a mobile earthquake simulator to stimulate heightened public awareness about earthquake preparedness.

## Regulatory Context

### *Federal Regulations*

#### **Federal Wildland Fire Management Policy and Program Review**

The Federal Wildland Fire Management Policy and Program Review<sup>31</sup> was chartered in 1994 by the Secretaries of the Interior and Agriculture to ensure that federal policies are uniform and programs are cooperative and cohesive.

### *State Regulations*

#### **California Fire Code**

The California Fire Code (CFC) applies to all occupancies throughout the State of California as annotated. The CFC is the minimum state standard for fire code implementation in California, and is based on the content of the Uniform Fire Code.<sup>32</sup> The CFC establishes fire flow requirements. The minimum fire flow requirements for one-and two-family dwellings having a fire flow calculation area which does not exceed 3,600 square feet is 1,000 gallons per minute.<sup>33</sup> The CFC provides for a reduction in required flow of up to 50 percent when the building is provided with an approved automatic sprinkler system.

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<sup>31</sup> US Forest Service, “Wildland Fire Policy,” <http://www.fs.fed.us/fire/management/policy.html>, 2008.

<sup>32</sup> The National Fire Protection Agency Uniform Fire Code, 2006.

<sup>33</sup> California Code of Regulations, Title 24, Part 9, California Building Standards Commission, 2007 *California Fire Code*, pp. 518 and 519. Table B105.1.



### **California Department of Forestry and Fire Protection (CAL FIRE)**

California Department of Forestry and Fire Protection (CAL FIRE) is responsible for the fire protection and stewardship of over 31 million acres of California's privately owned wildlands. In addition, CAL FIRE provides emergency services in 36 of the state's 58 counties via contracts with local governments.

The CAL FIRE Director's responsibility includes identification of very high fire hazard severity zones (VHFHSZ); transmit this information to local agencies, and to periodically review the recommendations.<sup>34</sup>

### **Government Code Section 8607, Health and Safety Code Sections 13071 and 13072**

#### ***Standardized Emergency Management System (SEMS)***

In an emergency, governmental response is an extension of responsibility and action, coupled with normal day-to-day activity. Normal governmental duties will be maintained, with emergency operations carried out by those agencies assigned specific emergency functions. The Standardized Emergency Management System (SEMS) has been adopted by Los Angeles County and the City for managing response to multi-agency and multi-jurisdiction emergencies and to facilitate communications and coordination among all levels of the system and among all responding agencies. Chapter 1 of Division 2 of title 19 of the California Code of Regulations establishes the standard response structure and basic protocols to be used in emergency response and recovery.

Fully activated, the SEMS consists of five levels: field response, local government, operational areas (Countywide), OES Mutual Aid Regions, and state government.

SEMS establishes the following:

- Organizational levels for managing emergencies;
- Standardized emergency management methods; and
- Standardized training for emergency responders and managers.

All local governments, including counties, cities, school districts and special districts, must use SEMS to be eligible for funding of their personnel related costs under state disaster assistance programs. The

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<sup>34</sup> California Government Code, Section 51178 and 51181

County of Los Angeles and City of Santa Clarita are currently using this system for emergency response in the OVOV Planning Area.

### **Wildland Hazard and Building Codes**

The Office of the State Fire Marshal's (OSFM) emergency regulations regulate fire hazards through the Wildland Hazard and Building Codes.<sup>35</sup> The majority of the new requirements take effect in 2008. These new codes include provisions for ignition-resistant construction standards in the wildland-urban interface. The updated fire hazard severity zones will be used by building officials to determine appropriate construction materials for new buildings in the wildland urban interface. The updated zones will also be used by property owners to comply with natural hazards disclosure requirements at time of property sale. It is likely that the fire hazard severity zones will be used by local governments as they update the Safety Element of their General Plans.

The Wildland Hazard and Building Codes state:

*701A.3.2 New Buildings Located in Any Fire Hazard Severity Zone. New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, any Local Agency Very-High Fire Hazard Severity Zone, or any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter. New buildings located in any Fire Hazard Severity Zone shall comply with one of the following:*

*1. State Responsibility Areas.*

*New buildings located in any Fire Hazard Severity Zone within State Responsibility Areas, for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*

*2. Local Agency Very-High Fire Hazard Severity Zone.*

*New buildings located in any Local Agency Very High Fire Hazard Severity Zone for which an application for a building permit is submitted on or after July 1, 2008, shall comply with all sections of this chapter.*

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<sup>35</sup> California Code of Regulations, Title 24, Part 2, (known as the 2007 California Building Code), California Department of Forestry and Fire Protection, "Wildland Hazard and Building Codes" [http://www.fire.ca.gov/fire\\_prevention/fire\\_prevention\\_wildland.php](http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland.php)

3. *Wildland-Urban Interface Fire Area designated by the enforcing agency.*

*New buildings located in any Wildland-Urban Interface Fire Area designated by the enforcing agency for which an application for a building permit is submitted on or after January 1, 2008, shall comply with all sections of this chapter.*

The broad objective of the Wildland-Urban Interface Fire Area Building Standards is to establish minimum standards for materials and material assemblies (components combined together to make a ceiling or floor) and provide a reasonable level of exterior wildfire exposure protection for buildings in wildland-urban interface fire areas. CAL FIRE and OSFM revised the mandatory effective date for those areas where local government has responsibility for wildland fire protection to July 1, 2008, to enable local government agencies more time to review and accept the fire hazard severity zone maps.

### **Fire Hazard Severity Zones**

CAL FIRE is remapping fire hazard severity zones for lands where the state has fiscal responsibility for wildland fire protection (State Responsibility Area) and is preparing Very High Fire Hazard Severity (VHFHS) recommendations for local responsibility areas. CAL FIRE has adopted VHFHSZ maps for those areas of California where the state has fiscal responsibility for wildland fire protection, known as State Responsibility Areas (SRA).<sup>36</sup>

CAL FIRE is preparing recommendations for VHFHSZ in those areas where local government agencies have Local Responsibility Areas (LRA) and will transmit those recommendations to local agencies in 2008.<sup>37</sup> During the fire hazard severity zone hearing for SRA, several local government officials asked for clarification of authorities and responsibilities associated with the adoption of these LRA VHFHSZ recommendations. The purpose of the VHFHS zone recommendations is to classify lands in accordance with whether a very high fire hazard severity is present so that public officials are able to identify measures that will mitigate the rate of spread, and reduce the potential intensity of uncontrolled fires that threaten to destroy resources, life, or property. CAL FIRE staff has been instructed to assist local agencies in the review of the draft map recommendations. In addition to the VHFHS maps, CAL FIRE has mapped high and moderate fire hazard severity areas.

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<sup>36</sup> Public Resources Code Sections 4201 – 4204 and Government Code Sections 51175–51189

<sup>37</sup> Government Code Sections 51175–51189

## ***Local Regulations***

### **Los Angeles County Fire Department (LACoFD)**

County programs directed toward wildland fire prevention include the adoption of the State Fire Code for regulations and standards to be applied toward new development in “hazardous fire areas.” Fire prevention items addressed in the Fire Code include provision of access roads, adequate road widths, and clearance of brush around structures located in hillside areas that are considered primary wildland fire risk areas. Compliance with County Building Codes requires that new development within high fire hazard areas show proof through certification with the LACoFD that new development is located within a designated distance of a water source such as water supply tanks or retention basins for emergency fire fighting purposes. Furthermore, the Water Code specifies that water storage facilities be placed to ensure gravity emergency fire flow in the event power lines are damaged.

### **Thresholds of Significance**

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

A significant impact on fire protection services will occur if the proposed Area Plan had:

- Substantial adverse physical impacts associated with the provision of new or expanded fire protection services or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.

### **Impact Analysis**

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on fire protection services within the County’s Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-4                      Substantial potentially adverse physical impacts associated with the provision of new or expanded fire protection services or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives.**

The provision of fire stations varies more as a function of the geographic distribution of structures than of population increases. One of the most important criteria for effective firefighting is the response time needed to reach the site of the fire. Existing stations are strategically located to ensure adequate service within the area. Nevertheless, as buildout of the County occurs, more structures will be built and the potential for an increase in structural fires will increase (**Policies LU 3.3.5 and LU 3.3.7**).

Buildout of the Area Plan would increase residential, commercial, and industrial development which would create an increase in demand for fire prevention and suppression services. The County's 2008 population was 75,000 residents. There are currently 6 fire stations within the County's Planning Area (**Figure 3.15-2**). LACoFD has a goal of 5 minutes or less for response times for urban areas, 8 minutes or less for suburban areas, and 12 minutes or less for rural areas (Volume of Calls). The median response time throughout the County's Planning Area was 5 minutes 42 seconds (**Policies S 3.3.1 to S 3.3.3**). Buildout of the County Planning Area would total approximately 237,387 people. To adequately maintain or reach the response time goals set by LACoFD there would need to be more fire stations located throughout the County's Planning Area (**Policy LU 3.3.4 and Policies S 3.1.1 to 3.1.3**). Potential impacts regarding people's exposure to injury or damage to structures in new development within areas of very high fire hazard severity zone are discussed under Impact 3.11-4 in **Section 3.11, Hazards and Hazardous Materials**.

Providing fire service to foothill areas is currently difficult and will continue to be a hazard in the future. These foothill areas have a greater chance of being exposed to wildland fires. The foothill areas also have a greater density of vegetation, which has a very high oil content that creates fire danger. Wildland fires are a serious and growing hazard. As the County reaches buildout the only undeveloped areas would be the foothills around the County's Planning Area (**Policy CO 2.2.2 and Policy CO 3.4.2**). This would mean that if the United States Forest Service (USFS) cannot adequately contain a fire, then LACoFD would add support (**Policy S 3.2.6**). It also indicates that the County, City of Santa Clarita, and USFS would need to coordinate jurisdiction areas with any new development. This new development would indicate an increasing number of people would be living and playing in wildland/urban intermix areas. Wildland/urban interfaces (WUI) create extremely dangerous and complex fire conditions, posing a safety threat to the public and firefighters (**Policy CO 3.6.5**). As described in **Section 3.11** of this EIR,

**Hazards and Hazardous Materials**, for any new residential development located within or near a WUI there are required setbacks for landscapes (**Policy LU 3.3.2** and **Policies S 3.2.1 to S 3.2.7**).

Additional development, particularly industrial, would increase the amount of hazardous materials, such as gasoline, crude oil, and acids stored or used within the County's Planning Area. Service calls regarding the containment of hazardous materials are serious and may require the assistance of specialists. Development of additional roadways and increased traffic would increase the potential for hazardous material accidents along roadways within the County's Planning Area.

The increase in residential population and employment opportunities with the proposed Area Plan and resulting demand for fire protection and emergency medical services is considered a significant impact.

To achieve fire protection for all residents of the County's Planning Area, the County Department of Public Works Building and Safety Division and LACoFD would enforce fire standards as they review building plans and conduct building inspections. Additional programs implemented to ensure compliance with established fire standards include: the maintenance of a Countywide Information Map, showing area of high fire hazard areas, and the provision of uniform fire improvement standards for various land uses. Additional fire stations would also be funded by the Joint Consolidated Annual Tax Bill (**Fire Service Funding** subsection).

### ***Proposed Area Plan Policies***

- Policy LU 3.3.2:** In areas subject to wildland fire danger, ensure that land uses have adequate setbacks, fuel modification areas, and emergency access routes.
- Policy LU 3.3.4:** Evaluate service levels for law enforcement and fire protection as needed to ensure that adequate response times are maintained as new residential development is occupied.
- Policy LU 3.3.5:** Through the development review process, ensure that all new residential development is provided with adequate emergency access and that subdivision and site designs permit ready access by public safety personnel.
- Policy LU 3.3.7:** Ensure adequate addressing in all residential neighborhoods for emergency response personnel.
- Policy CO 2.2.2:** Ensure that graded slopes in hillside areas are revegetated with native drought tolerant plants or other approved vegetation to blend manufactured slopes with

adjacent natural hillsides, in consideration of fire safety and slope stability requirements.

- Policy CO 3.4.2:** Consider principles of forest management in land use decisions for projects adjacent to the National Forest, including limiting the use of invasive species, discouraging off-road vehicle use, maintaining fuel modification zones and fire access roads, and other measures as appropriate, in accordance with the goals set forth in the Angeles National Forest Land Management Plan.
- Policy CO 3.6.5:** Ensure revegetation of graded areas and slopes adjacent to natural open space areas with native plants (consistent with fire prevention requirements).
- Policy S 3.1.1:** Coordinate on planning for new fire stations to meet current and projected needs.
- Policy S 3.1.2:** Program adequate funding for capital fire protection costs and explore all feasible funding options to meet facility needs.
- Policy S 3.1.3:** Require adequate fire flow as a condition of approval for all new development, which may include installation of additional reservoir capacity and/or distribution facilities.
- Policy S 3.2.1:** Identify areas of the Santa Clarita Valley that are prone to wildland fire hazards and address these areas in fire safety plans.
- Policy S 3.2.2:** Enforce standards for maintaining defensible space around structures through clearing of dry brush and vegetation.
- Policy S 3.2.3:** Establish landscape guidelines for fire-prone areas with recommended plant materials, and provide this information to builders and members of the public.
- Policy S 3.2.4:** Require sprinkler systems, fire resistant building materials, and other construction measures deemed necessary to prevent loss of life and property from wildland fires.
- Policy S 3.2.5:** Ensure adequate secondary and emergency access for fire apparatus, which includes minimum requirements for road width, surface material, grade, and staging areas.

- Policy S 3.2.6:** For areas adjacent to the National Forest, cooperate with the United States Forest Service regarding land use and development issues.
- Policy S 3.2.7:** Continue to provide information and training to the public on fire safety in wildland interface areas.
- Policy S 3.3.1:** Plan for fire response times of five minutes in urban areas, eight minutes in suburban areas, and 12 minutes in rural areas.
- Policy S 3.3.2:** Require the installation and maintenance of street name signs on all new development.
- Policy S 3.3.3:** Require the posting of address numbers on all homes and businesses that are clearly visible from adjacent streets.

### ***Effectiveness of the Proposed Area Plan Policies***

The proposed Area Plan policies would be effective against the threat of fire to structures, ensure adequate response times, and ensure that any impact to fire services is reduced to a less than significant level. However, to insure that there is adequate resources for LACoFD, mitigation measures shall be required.

### **Plan to Plan**

Since the buildout population under the existing Area Plan would be greater than that of the buildout population under the proposed Area Plan, the County's fire protection needs at existing Area Plan buildout would be greater. As population increases the number of emergency calls and the emergency response times would potentially increase. Therefore, impacts on fire protection would be greater with buildout of the existing Area Plan.

### **Mitigation Framework**

Implementation of the following mitigation measures would reduce potential impacts on fire hazards to a less than significant level.

- MM 3.15-2** Concurrent with the issuance of building permits, the project applicant shall participate in the Developer Fee Program to the satisfaction of the County of Los Angeles Fire Department.



**MM 3.15-3** Adequate water availability shall be provided to service construction activities of any project to the satisfaction of the County of Los Angeles Fire Department.

### Significance of Impact with Mitigation Framework

Implementation of the proposed Area Plan policies and mitigation measures **MM 3.15-2** and **MM 3.15-3** would reduce potential impacts related to the effects of future development on fire protection services by reducing the threat of fire, improving the firefighting infrastructure, and ensuring that growth does not exceed acceptable levels of service. Therefore, potential impacts related to fire protection services would be reduced to a less than significant level.

## POLICE PROTECTION

### Summary

The Los Angeles County Sheriff's Department provides law enforcement services in the County's Planning Area. The Los Angeles County Sheriff's Department administers the incarceration facility, while the California Highway Patrol (CHP) provides traffic patrol primarily on state highways, enforces traffic regulations, traffic control in unincorporated areas, and responds to traffic accidents and incidents within the County's Planning Area. The standard level of service for the Los Angeles Sheriff's Department is to have one officer per 1,000 residents. The current amount of sworn officers serving the OVOV Planning Area are 171 and there would need to be an additional 66 sworn officers within the County's Planning Area, from 2008 until buildout, to adequately meet the one sworn officer per 1,000 residents standard. With the incorporation of the proposed Area Plan policies and the implementation of mitigation measure **MM 3.15-4**, impacts on police protection would be less than significant.

### Existing Conditions

The County's Planning Area is served by the Los Angeles County Sheriff's Department's Santa Clarita Valley Station. The Sheriff's service area covers 656 square miles that includes the portions of Los Angeles County unincorporated areas and the City of Santa Clarita.<sup>38</sup>

In addition to urbanized areas, the service area encompasses major recreational destinations including, the Angeles National Forest, Magic Mountain Amusement Park, Castaic Lake, Pyramid Lake, and Hungry Valley Off-Road Recreational Vehicle Park. **Figure 3.15-3, Sheriff Station Locations within OVOV Planning Area**, shows the Sheriff Service Area and facility locations.

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<sup>38</sup> City of Santa Clarita, Draft OVOV Safety Element. (2008).

The Los Angeles County Sheriff's Department oversees general law and traffic enforcement within the Santa Clarita Valley, while the CHP has jurisdiction over traffic on state highways and in the unincorporated areas.

### ***Facilities***

The Sheriff's station, located in Valencia, was designed to house a staff of approximately 90 people, but is insufficient to meet current needs, according to Sheriff's representatives. In addition, the Los Angeles County Sheriff's Department operates a storefront station in Newhall. The Storefront station is staffed 8 to 12 hours a day, and sometimes staffed by civilians.

### ***Staffing and Equipment***

Over the past 20 years, the staffing levels at the station have been fairly constant.<sup>39</sup> There have been fluctuations in the number of officers available for patrol services but they have been small. As of 2008, the station operates with 171 sworn deputies and support staff.

Staffing within the Santa Clarita Valley is split into three shifts. As of January 1, 2003, the day shift consists of five patrol cars, seven traffic cars, two motor units, the Career Offenders Burglary Robbery Apprehension (COBRA) team, and five school resource deputies. The traffic unit is to investigate collisions within the City's Planning Area, and to decrease the number of collisions through enforcement of the California Vehicle Code. The COBRA team is responsible for investigating all crimes perpetrated by juveniles in the City's Planning Area. They are also responsible for tracking any gang activity and gang related crimes. The COBRA unit works hand in hand with local probation and parole officers, assisting them with probation and parole searches throughout the area. The operations team, which includes school resource deputies, handles; all misdemeanor filings, crime analysis, all secretarial functions, evidence and property issues and all crimes committed on school campuses. The PM shift consists of eight general law cars and eight traffic cars, and the AM shift consists of three patrol cars and two traffic cars.<sup>40</sup> While most officers are on duty at least Monday through Friday, there are variations, depending on the shift and day of the week. Numbers are also adjusted during holidays and special events.

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<sup>39</sup> City of Santa Clarita. Draft OVOV Safety Element. (2008).

<sup>40</sup> Ibid.

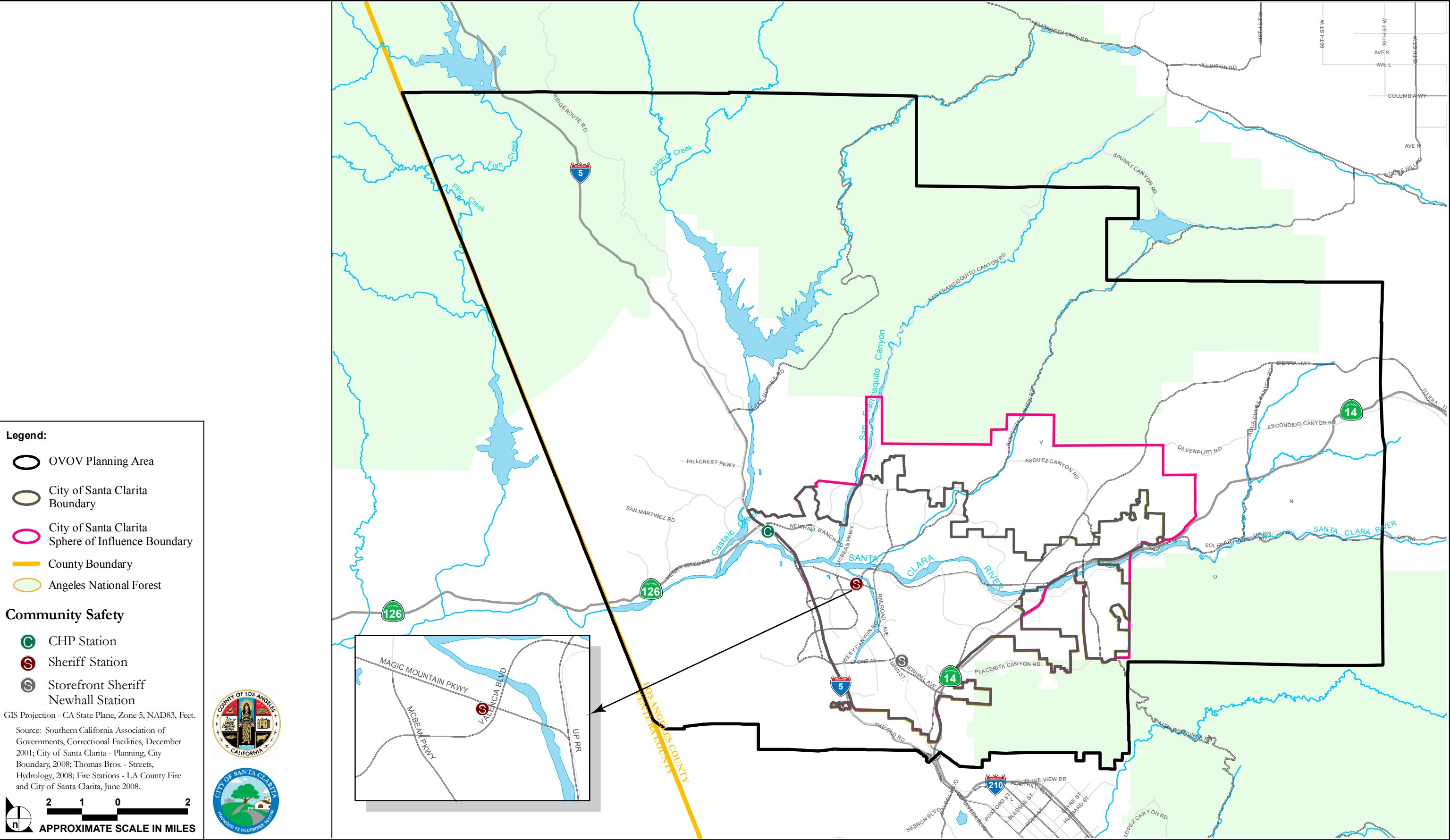


FIGURE 3.15-3

Sheriff Station Locations within the OVOV Planning Area

As of October 2007, there are 53 patrol vehicles in the station's motor pool fleet. There are approximately 30 active patrol units at any given time, depending upon daily conditions. There are also two motorcycles, three Search and Rescue vehicles, and seven "unmarked" cars for detectives. The station currently has a request for eight more patrol vehicles being processed. This increase in vehicles will meet current and anticipated needs, but if additional staffing increases were to occur, then the number of vehicles needed would also increase.<sup>41</sup>

### ***Standards***

While there is no current law enforcement staffing standards available, the Los Angeles County Sheriff's Department strives to maintain one officer per 1,000 people in County areas. Staffing of patrol areas is also based on the calls for service and other activity in a specific area.

### **Classification of Calls**

Response time for law enforcement calls varies depending on the time of day, number of officers on duty, and traffic conditions. Calls are classified as one of three categories: Routine, Priority, and Emergent. Routine incidents are of a non-priority nature and do not require a priority response from the field units; e.g., vandalism of private property. Priority incidents are those that require an immediate response but not a code three response; e.g., a family disturbance. Emergent incidents are an automatic code three response; e.g., a traffic accident or shooting. As the population continues to grow in the County's Planning Area, it is likely that the total number of calls for service will increase as well.

### ***Crime Statistics***

The Santa Clarita Sheriff's service area is divided into 59 reporting districts. **Table 3.15-9, Part I Crime Statistics for the County's Planning Area 2000–2007**, reports the number of Part I offenses (homicide, rape, robbery, aggravated assault, burglary, larceny theft, grand theft auto, arson) by categories in the County's Planning Area between 2000 and 2007.

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<sup>41</sup> Cambra (2007).

**Table 3.15-9**  
**Part I Crime Statistics for the County's Planning Area 2000–2007**

<b>Year</b>	<b>Criminal Homicide</b>	<b>Forcible Rape</b>	<b>Robbery</b>	<b>Aggravated Assault</b>	<b>Burglary</b>	<b>Larceny Theft</b>	<b>Grand Theft Auto</b>	<b>Arson</b>	<b>Total Part I Crimes</b>
2000	2	7	26	79	180	504	102	21	921
2001	4	16	30	75	199	576	135	30	1,065
2002	2	9	21	99	265	544	192	34	1,166
2003	0	6	25	72	310	672	148	24	1,257
2004	3	8	41	105	349	687	170	14	1,377
2005	0	10	35	94	348	792	188	28	1,495
2006	1	8	26	67	389	853	164	14	1,522
2007	8	12	43	65	298	988	206	26	1,646

Source: *Crime and Arrest Statistics, Santa Clarita Valley Station, 2000-2007*

From 2001 to 2007, crime rates had steadily increased in total Part 1 crimes for the County's Planning Area. The only criminal category that had decreased for the County's Planning Area was aggravated assault.

### *Services*

The Sheriff's Department focuses not only on crime investigation, but also on crime prevention. Sheriff personnel believe that community-oriented policing is an effective way to prevent crime at the local level, and accordingly engages citizens in crime prevention efforts. There are a number of units or specialized divisions with a specific focus:

- The Community Relations Unit at the Sheriff's Station oversees the community-oriented policing programs, including the neighborhood watch, business watch, school watch, vacation security, and crime prevention programs.
- The Detectives' Bureau consists of three divisions—Burglary, Robbery/Assault, and COBRA, which handles juvenile and gang-related crimes.<sup>42</sup>
- The Traffic Unit Department is responsible for issuing citations, as well as for responding to auto incidents and collisions. Their goal is to reduce the total number of traffic accidents.

<sup>42</sup> McIntosh (2001).

- The Santa Clarita Station is also equipped with air support. The AIR-29 helicopter provides high tech support for ground deputies, with an infrared device that can see in the dark. The station's helicopter also comes complete with spot lighting, a Lo-Jack stolen video locator, moving map technology, and multiple radio communications.
- SCV Search and Rescue is a highly trained volunteer group overseen by the Sheriff's Department. Its members serve as emergency medical technicians, reserve deputies, and mountain rescuers.
- The Sheriff's Department, in coordination with other governmental agencies, works with community members and organizations to provide numerous programs for residents within the station's service area. Programs include the Anti-Gang Task Force, Citizens' Option for Public Safety (COPS) Grant, Drug Education, Family Violence Task Force, Gang Education, Graffiti Abatement Program, Local Law Enforcement Block Grants, and various emergency response programs.<sup>43</sup>

### *California Highway Patrol*

The CHP provides traffic regulation enforcement for unincorporated Santa Clarita Valley and surrounding areas from its station located at 28648 The Old Road, near the interchange of Interstate 5 and State Route 126. The CHP patrols a service area of approximately 700 square miles, which includes Interstate 5, State Route 126, State Route 14, and all unincorporated areas and roadways. This service area extends westerly to the Ventura County line, east to Agua Dulce, north to State Route 138 (and along State Route 138 to Avenue 22 East), and south to State Route 118.

The primary responsibility of the CHP is to patrol State Highways and County roadways in the previously identified service area, enforce traffic regulations, respond to traffic accidents, and to provide service and assistance for disabled vehicles. The CHP also has a major role in the state's enhanced anti-terror activities.<sup>44</sup> The CHP's overall level of staffing is about 10,700 statewide positions, 1,123 uniformed officers for the Southern Division (state freeways and 64 unincorporated communities of Los Angeles County as its primary jurisdiction), and approximately 86 field patrol officers for the OVOV Planning Area. The department is comprised of uniformed (sworn) and non-uniformed (non-sworn) personnel, with uniformed personnel accounting for approximately 7,300 positions, or 67 percent, of total staff.<sup>45</sup>

In the Santa Clarita Valley area, the CHP maintains a Mutual Aid Agreement with the Los Angeles County Sheriff's Department. The Newhall Area Station area is staffed by 86 sworn officers and 9 civilian

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<sup>43</sup> City of Santa Clarita (2002).

<sup>44</sup> *Analysis of the 2006-2007 Budget Bill*, Legislative Analyst's Office, February 2006.

<sup>45</sup> Telephone communication with Officer Michelle Esposito, Newhall Area Station, California Highway Patrol, February 10, 2009.

employees. The Los Angeles and Orange County areas are served on a limited basis by a helicopter and a fixed wing aircraft based at Fullerton Airport. There are currently no plans to centrally base a helicopter to service the Los Angeles County Basin. The Newhall CHP has indicated that its facilities and staffing are adequate to meet current demands in its service area.<sup>46</sup>

### ***Incarceration Facilities***

The Peter J. Pitchess Detention Center in Castaic serves the entire OVOV Planning Area. The jail consists of four facilities: North, South, East, and the North County Correctional Facility. Together, these facilities comprise the largest jail complex in Los Angeles County.<sup>47</sup> However, the South Facility is no longer operational. Built in 1987, the North Facility sits on 7 acres and has a housing capacity of 1,500 inmates. As a maximum-security facility, it has an intrusion alarm system, closed circuit television systems, and strict inmate supervision. The South Facility, which is no longer in operation, was built in 1971 as a hospital facility. A barracks-style building, it was updated in 1984. It was then used as a medium security facility, and most recently served as a vocational training site for approximately 1,966 inmates. Built in 1951, the East Facility is the oldest operational jail in Los Angeles County. It has been renovated a number of times and now has a maximum capacity of 1,974 inmates.

North County Correctional Facility was built in 1989. It is a maximum security complex, with total housing capacity of 3,800 inmates. It also houses three vocational training programs, including computer sign production, clothing manufacturing, and printing. These programs along with other educational programs offered at Pitchess Detention Center, serve to provide inmates with a vocation for their return to society. In addition to these facilities, two youth camps serving the region are located within the City's Planning Area. The Los Angeles County Probation Department provides secure detention for delinquent minors in juvenile halls and control and rehabilitation programs in camps such as Camp Scott and Camp Scudder. These juvenile halls and camps provide confinement to minors ranging in ages from 8 to 18 who await adjudication and disposition of legal matters. Camps provide treatment, care, custody, and training for the rehabilitation of delinquent minors as wards of the Juvenile Court.

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<sup>46</sup> Per information from The Master's College EIR: Telephone interview with Lieutenant Mark Odle, California Highway Patrol, Newhall Area Station, November 17, 2006.

<sup>47</sup> Per information from The Master's College EIR: Telephone interview with Lieutenant Mark Odle, California Highway Patrol, Newhall Area Station, November 17, 2006.

## Regulatory Context

Law enforcement services are provided through the efforts of various federal, state, and local government agencies. These agencies work jointly, as well as individually, to improve and conserve the law enforcement services of particular areas through legislation, regulations, planning, policy making, education, and a variety of other programs. This section discusses the various federal, state, local, and other agencies regulations that the proposed project would be obligated to follow in regard to law enforcement services.

### *State Regulations*

#### **Law Enforcement Facilities Fees for North Los Angeles County**

On May 27, 2008, the Los Angeles County Board of Supervisors adopted law enforcement facilities fees for North Los Angeles County.<sup>48</sup> This mitigation fee is for new residential, commercial, office, and industrial areas located within the unincorporated areas of North Los Angeles County known as Santa Clarita, Newhall, and Gorman (the law enforcement facilities fee zones).<sup>49</sup> Also approved at this time was a capital improvement/construction plans for law enforcement facilities for North Los Angeles County. Each of the law enforcement facility areas will have a separate fee, and the amount of the fee will be set at a base level sufficient to provide, or contribute to, the provision of adequate law enforcement services that is in direct proportion to the population increases from new development that warrant or contribute to the need for a new facility.<sup>50</sup> In areas where a new facility is not required, the fee will be used to augment existing service capacity through the purchase of equipment directly to serve the new population.

The amount of the fee established shall be reviewed annually by the Sheriff's Department, in consultation with the County Auditor-Controller.<sup>51</sup> Further, on July 1 of each year, the fee in each law enforcement facilities fee zone shall be adjusted based on the Engineering News Record-Building Construction Cost Index.<sup>52</sup> The related Capital Improvement Construction Plan setting forth the approximate location, size, time of availability, and estimates of cost for the facilities and improvements to be financed with the fee for the Santa Clarita and Newhall areas will be annually updated by the Board of Supervisors.

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<sup>48</sup> L.A. County Code, Ch. 22.74, Section 22.74.010 et seq.

<sup>49</sup> Ibid., Ch. 22.74, Section 22.74.010.

<sup>50</sup> Ibid., Ch. 22.74, Section 22.74.030.

<sup>51</sup> L.A. County Code, Ch. 22.74, Section 22.74.040.

<sup>52</sup> Ibid.



## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines* identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

- The proposed Area Plan would have a significant impact on sheriff services with the increase in the population that will cause the services to not be met by the available Sheriff's Department personnel or equipment.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on law enforcement services within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-5                      The proposed Area Plan would have a potentially significant impact on sheriff services with the increase in the population that will cause the services to not be met by the available Sheriff's Department personnel or equipment.**

Implementation of the proposed Area Plan, with the expected population buildout of 237,387, would result in the need for increased demand for Sheriff facilities, protection, and services. Commercial and mixed-use development could result in a proportionate increase in crimes related to commercial/multi-family residential properties, including robbery, burglary, auto theft, and grand/petty theft. Potential traffic increases could also result from workers commuting to and from work, and therefore, the number of traffic collisions and violations may rise (**Policy S 5.1.1**).

The Sheriff's department in 2008 had 171 sworn deputies to serve the 75,000 residents in the County's Planning Area. That would mean the County's Planning Area would have approximately two officers per 1,000 residents, which exceeds the "one sworn officer per 1,000 resident" standard. The projected build out of 237,387 residents for the County's Planning Area would require 237 officers to adequately cover the area to meet the standard. From 2008 until complete buildout, there would need to be an additional 66 officers to meet the goal of one officer per 1,000 residents.

The ability for the Sheriff's Department to meet the needs of the County's Planning Area not only depends on the number of officers serving, but it requires additional stations to house these officers and would need additional facilities to house incarcerated people. The ability of the Sheriff's Department to support the needs of future growth is also dependent upon its financial ability to hire additional sworn

personnel (**Policies S 5.1.2 and S 5.1.3**). In addition, a growing population would require that the Sheriff's Department secure sites and construct new detention facilities on a timely basis. Because the CHP covers such a large area there would need to be an increase in the number of officers serving the area to be able to adequately handle the buildout population.

The Area Plan is proposed to abate blighting conditions and stimulate economic development throughout the County's Planning Area by enforcing design standards, landscape standards, citywide beautification programs, rehabilitation of older buildings, as well as prohibiting incompatible land uses—all of which will help to improve the perception of public safety and offset any increases in demand for police protection (**Policy S 5.2.1 to Policy S 5.2.4**). Further, the Area Plan is expected to result in circulation system improvements, and new and rehabilitated developments that will incorporate better building design, lighting, security, hardware, location, visibility, and landscape treatments than currently exists. These improvements, in turn, will enhance public safety and potentially result in fewer calls for police protection services than would result without the Area Plan.

### ***Proposed Area Plan Policies***

- Policy S 5.1.1:** Participate in a multi-jurisdictional task force to evaluate alternatives for combining public safety services with administrative services within a centralized government complex serving the entire Santa Clarita Valley.
- Policy S 5.1.2:** Provide staff assistance to assess future law enforcement needs, and work together with the Sheriff's Department, the City of Santa Clarita, and other partners to develop and implement plans for meeting these needs.
- Policy S 5.1.3:** Cooperate on implementation of funding mechanisms for law enforcement services.
- Policy S 5.2.1:** Promote and participate in the Business Watch program to assist business owners in developing and implementing crime prevention strategies.
- Policy S 5.2.2:** Promote and support Neighborhood Watch programs to assist residents in establishing neighborhood crime prevention techniques.
- Policy S 5.2.3:** Provide code enforcement services to maintain minimum health and safety standards and as a deterrent to crime.

### ***Effectiveness of Proposed Area Plan Policies***

The Area Plan policies focus on the assurance that development does not exceed the ability of the County to provide sheriff protection. The policies do not ensure that communities and large private facilities will provide private security, nor do the policies set specific levels of service. In conjunction with the proposed Area Plan policies, the following mitigation measures will be implemented.

#### **Plan to Plan**

As described in this section, the Sheriff's Department uses a standard guideline of providing at least 1 sworn officer per 1,000 residents. The current number of sworn officers, within the County's Planning Area, is 171, which provides one officer per 439 residents. With buildout under the existing Area Plan, the number of officers required to maintain a standard of one officer per 1,000 residents would need to be 270 for the projected population of 270,000 residents, or an additional 99 sworn officers. The proposed Area Plan buildout population would be 237,387 residents and would therefore require 237 sworn officers, or an additional 66 sworn officers to maintain standards. The existing Area Plan would require an additional 70 sworn officers than the proposed Area Plan. Therefore, the existing Area Plan would have greater impacts on police protection.

#### **Mitigation Framework**

Implementation of the following mitigation measure would reduce potential impacts on law enforcement to a less than significant level.

**MM 3.15-4** Development applicant(s) shall be required to pay the Los Angeles County Sheriff's established law enforcement facility fees for North Los Angeles County prior to issuance of a certificate of occupancy on any structure. The fees are for the acquisition and construction of public facilities to provide adequate service to the residents of the County's Planning Area.

#### **Significance of Impact with Mitigation Framework**

The implementation of the proposed Area Plan policies, with the incorporation of the mitigation measure **MM 3.15-4**, would reduce the potential for significant impacts on law enforcement services to a less than significant level.

## 3.16 PARKS AND RECREATION

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### EXECUTIVE SUMMARY

Parks and open space are important land use components in an urban environment, providing both visual relief from the built environment and contributing to residents' quality of life through aesthetic, recreational, and social value. The County's Planning Area consists of unincorporated land outside of the City's boundaries and adopted Sphere of Influence (SOI) but within the One Valley One Vision (OVOV) Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Both the County and the City Planning Areas comprise the OVOV Planning Area. The County's Planning Area currently has 1,355 acres of parkland through a combination of neighborhood, community, and regional parks. Additionally, the County's Planning Area has 6,395 acres of open space.

A parkland standard is the ratio upon which dedications and/or development fees can be based; it creates an obligation to fund improvements that achieve the standard throughout the County. The Quimby Act, established by state law, requires that every county and city meet the standard of 3 acres of parkland per 1,000 residents. The County's proposed Area Plan requires the County meet a goal of 5 acres of parkland per 1,000 residents, which is allowed if a city or county adopts a General Plan with the seven required elements (Land Use, Circulation, Housing, Conservation, Open Space, Noise, and Safety); the proposed Area Plan includes all seven elements. The highest standard allowed under the Quimby Act is 5 acres of parkland per 1,000 residents.

Currently, the Quimby Act, which standardizes cities and counties to meet 3 acres per 1,000 people, would require the County's Planning Area to meet the goal of 225.0 acres of parkland. The County's Planning Area has 18.0 acres of local parkland per 1,000 residents, a surplus of 980 acres for purposes of meeting the goal of 5 acres per 1,000 residents. With buildout of the proposed Area Plan, the County's Planning Area parkland would need a total of 711 acres to reach the Quimby Act requirement and would need 1,185.5 acres of parkland for the Area Plan criterion. The existing and planned parkland would total 1,517.7 acres at buildout; the amount of parkland would be in a surplus for the Quimby Act standard and the Area Plan Standard. The amount of parkland would total 6.39 acres of parkland per 1,000 residents.

### EXISTING CONDITIONS

The Santa Clarita Valley is an irregularly shaped area draining a watershed of approximately 500 square miles. Its boundaries are defined by significant mountain ridges of varying heights. Major ridgelines of the San Gabriel and Santa Susana Mountains form the Valley boundary to the south, east, and west,

separating the area from the San Fernando Valley and metropolitan communities of the Los Angeles Basin to the South. Ridgelines of the Sierra Pelona Mountains define the Valley's northern reach. The physical characteristics of the OVOV Planning Area, in conjunction with the large amount of undeveloped land, afford Valley residents and visitors a wide array of open space that provide plentiful passive and active recreational opportunities. For purposes of this Parks and Recreation section, the definition for active and passive parkland is as follows:

- Active recreation requires the use of organized play areas such as softball, baseball, football, and soccer fields; volleyball, tennis, and basketball courts, swimming, and various forms of children's play equipment.
- Passive recreation typically does not require the use of organized play areas and are often irregular in shape and include open space areas, "pocket" parks, trails, and other unimproved lands. Passive recreation includes activities such as picnicking, and water sports such as fishing, rowing, and canoeing.

## Existing Parks

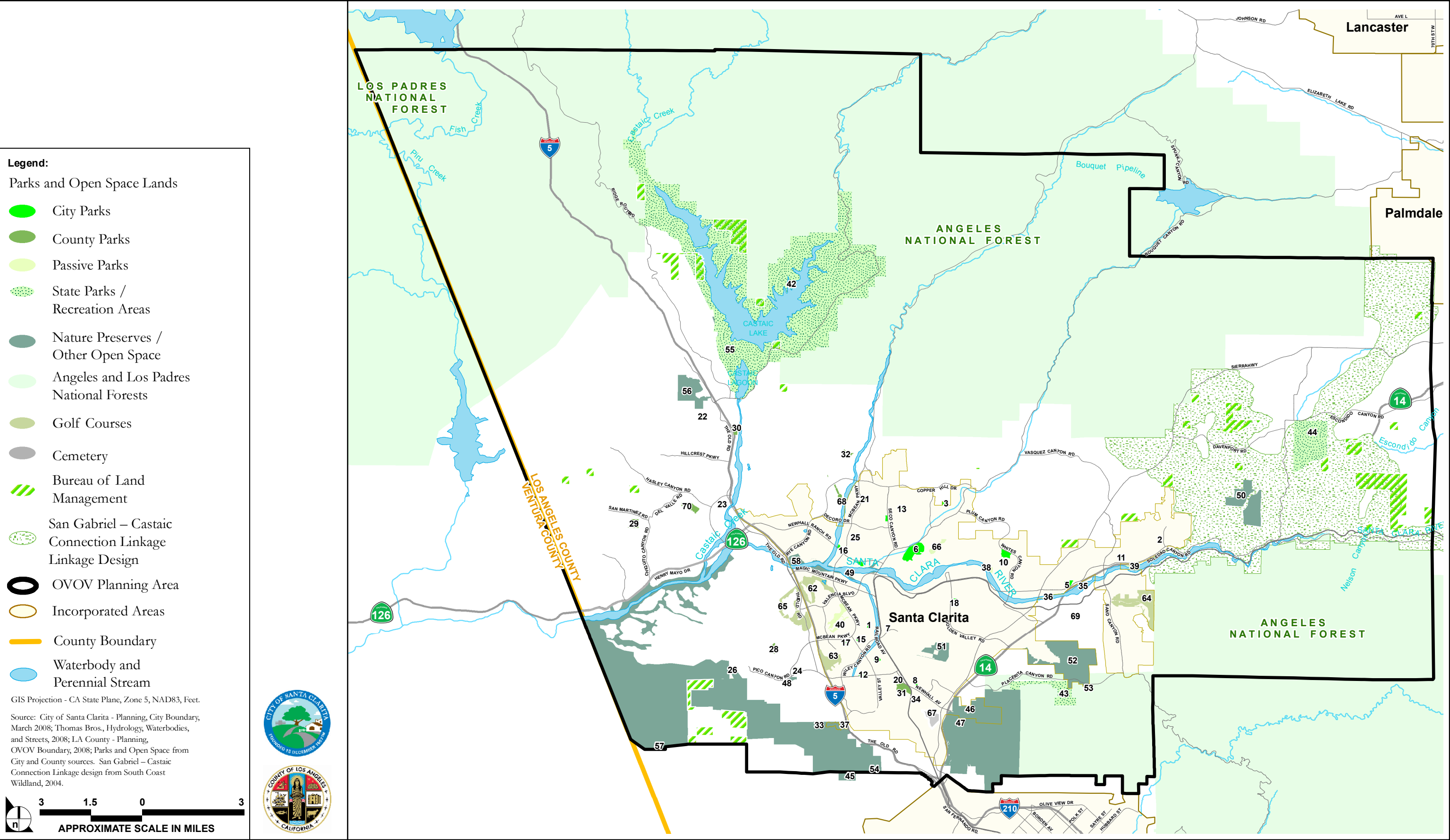
The Los Angeles County Department of Parks and Recreation currently operates 16 developed parks in the County's Planning Area, comprising 10,396 acres. The County's Planning Area parklands are shown on **Figure 3.16-1, Parks, Recreation, and Open Space Resources**, and listed in **Table 3.16-1, Existing Parklands in the County's Planning Area**. As required by the Quimby Act (3 acres of parkland per 1,000 residents) the amount of parkland required would be 225.0 acres. The goal set by the Area Plan (5 acres of parkland per 1,000 residents) would be 375 acres of parkland per 1,000 residents. As determined using the existing amount of parkland (1,355 acres), the ratio of parkland to residents would be 18.0 acres per 1,000 residents.

There are five types of parks<sup>1</sup> identified by the County of Los Angeles within the County's Planning Area:

- Open Space Nodes
- Pocket parks
- Neighborhood Parks
- Community Parks
- Regional Parks

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<sup>1</sup> County of Los Angeles. Chapter 6, "Conservation and Open Space Element." *Draft General Plan*. (2009).



SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - March 2009

FIGURE 3.16-1

Parks, Recreation, and Open Space Resources

**Table 3.16-1**  
**Existing Parklands in the County's Planning Area**

<b>County Parks</b>	<b>Acres</b>	<b>Type</b>	<b>Location (see Figure 3.15-1)</b>
Chesebrough County Park <sup>1</sup>	5.1	Neighborhood	21
David March (Plum Canyon)	12.9	Neighborhood	27
Del Valle Park	5.8	Neighborhood	22
Fair Oaks Park	6.0	Neighborhood	69
Hasley Canyon Park	5.4	Neighborhood	23
Jake Kuredjian Park	5.0	Neighborhood	24
Northbridge Park <sup>1</sup>	9.8	Neighborhood	25
Pico Canyon Park	18.0	Neighborhood	26
Tesoro Adobe Park	2.2	Neighborhood	32
West Creek County Park	15.4	Neighborhood	68
<b>Total Neighborhood Parks</b>	<b>85.6</b>		
Hasley Canyon Equestrian Park	16.0	Community	70
Richard Rioux Park	15.5	Community	28
<b>Total Community Parks</b>	<b>31.5</b>		
Castaic Sports Complex	51.0	Regional	30
Val Verde Park	57.6	Regional	29
William S. Hart Park <sup>1</sup>	224.3	Regional	31
Vasquez Rocks	905.0	Regional	44
<b>Total Regional Parks</b>	<b>1,237.9</b>		
<b>Subtotal</b>	<b>1,355</b>		
<b>State Owned Parkland</b>	<b>Acres</b>	<b>Type</b>	
Castaic Lake State Recreation Area	8,700.0	Regional	42
Placerita Canyon Nature Center	341.0	Regional	43
<b>Subtotal</b>	<b>9,041.0</b>		

County Parks	Acres	Type	Location (see Figure 3.15-1)
Open Space	Acres		
Castaic Open Space	335	MRCA	55
Ed Davis Park	168	Regional with SMMC	33
Elsmere Canyon	400	SMMC	47
Mentryville	800	MRCA	48
Michael D. Antonovic Open Space	480	MRCA	54
Newhall High County Open Space	140	SMMC	57
Santa Clarita Woodlands (excludes Ed Davis Park)	3,832	SMMC	45
Wilson Canyon Ranch	240	MRCA	56
<b>Subtotal</b>	<b>6,395</b>		
<b>Total</b>	<b>16,805.9<sup>3</sup></b>		

<sup>1</sup> These parks are located within City of Santa Clarita limits, but are maintained by the County of Los Angeles.

<sup>2</sup> City and Mountains and Recreation Conservation Authority

<sup>3</sup> This total does not include open space designated area within the OVOV Planning Area or the National Forest Land.

Source: City of Santa Clarita Department of Parks, Recreation, and Community Services 2007; County of Los Angeles Department of Parks and Recreation 2007; Table CO-2, Draft Conservation and Open Space Element One Valley, One Vision, 2008.

### ***Open Space Nodes***

Open space nodes are small pieces of open space that serve as public destination, connection, and community defining spaces. Nodes provide physical and visual breaks to the urban landscape and/or connect various spaces such as waterways, streets, trails, and greenways. Open space nodes are used as gathering and rest areas, and serve as opportunities for social, cultural, and community exchange. Examples of open space nodes include equestrian and hiking trailheads, bike rest stops and/or stations with lockers and repairs, neighborhood focal points, and passive amenities such as plazas, rest areas, playgrounds, landmarks, and public art installations.

### ***Pocket Parks***

Pocket parks are small pieces of parkland that serve a residential or business area within a 0.25-mile radius. Pocket parks are often developed on urban infill sites in park-poor communities. In general, pocket parks serve a passive need and do not have on-site parking.

### ***Neighborhood Parks***

Neighborhood parks typically provide active recreational areas with fields, courts, and/or some passive areas such as picnic areas. They vary in size from five to 10 acres and are intended to serve a population



up to 5,000 within a 0.5-mile radius. Generally, they are located centrally to the residential development served, and the service area for the neighborhood park should not be divided by natural or man-made barriers such as thoroughfares or irrigation or drainage canals. The County's Planning Area has eight neighborhood parks.

### ***Community Parks***

Community parks are at least 10 to 40 acres in size; located to serve several neighborhoods of approximately 20,000 people within a 2-mile radius. They can include both passive and active areas and may contain features such as gymnasiums, multi-purpose rooms, classrooms, and offices for recreation staff. Other facilities often found at community parks might include sports fields, sports courts, amphitheatres, group picnic areas, and off-street parking. Large special events such as concerts and festivals might also be held in community parks. The County's Planning Area has one community park.

### ***Regional Parks***

A regional park is a major park that offers recreation opportunities of such variety that it attracts people in the widest possible range of age and interests and generally serves the population living within a radius distance of approximately 1 hour's drive. Its size usually exceeds 40 acres, and offers unusual recreational attractions or a combination of two or more specialized facilities. Each of the attractions or facilities within the park is of major significance and together they offer both active and passive recreational opportunities. There are five County regional parks in the County's Planning Area.

Originally built in the 1920s, Val Verde Park provides a focal point for many community activities. The County has recently undertaken an expansion of Val Verde Park by purchasing a lot near the park entrance, and providing new football fields, basketball courts, tennis courts, restrooms, playground, and landscaping.

William S. Hart Park is the former home and ranch of William S. Hart, silent film cowboy star and director. The park includes a museum within a Spanish Colonial Revival style mansion, which contains original furnishings, a collection of western art, mementos of early Hollywood, and Native American artifacts. In addition, there is a furnished 1910 ranch house that is open for unguided tours.

### **Nature Reserves and Other Open Space**

In an innovative partnership, the County teamed with developer Newhall Land to preserve the 6,000 acres of the Newhall Ranch high country, located between the City of Santa Clarita limits and the Ventura

County line. The Newhall Ranch High Country Recreation and Conservation Joint Powers Agency was formed to maintain this open space land. On March 7, 2007, a property owner's donation of 400 acres in Elsmere Canyon to the Mountains and Recreation Conservation Authority for use as an open space preserve received final approval. Elsmere Canyon is a natural, riparian area that contains vital links between the Angeles National Forest, Placerita Canyon Nature Center, and Whitney Canyon for the wildlife corridor, connecting the San Gabriel, Santa Susana and Santa Monica mountains. The canyon contains waterfalls, rolling hills, riparian habitats, coastal sage and oak woodlands, and significant ecological, cultural, and historical treasures. Another 800 acres of the canyon are deemed in need of protection in the future.<sup>2</sup>

### ***Vasquez Rocks***

Vasquez Rocks County Park located in the community of Agua Dulce west and north of State Route (SR) 14, is an area of unique geologic formations that has been the site of hundreds of film shoots. Sculpted by earthquake activity along the Elkhorn fault, the rock formations were compressed, folded, and tilted up to a height of nearly 150 feet. Erosion has shaped the coarse-grained yellow sandstone into jutting and sweeping formations interspersed with shale and basalt layers. Vasquez Rocks are both a visual and historical landmark in the community.

### ***Santa Clarita Woodlands State Park***

This 3,000-plus-acre state park is located west of I-5 and may be accessed via either Lyons Avenue or the Calgrove/The Old Road interchanges. The creation of this park involved a land transaction that included the City of Santa Clarita, Chevron, and the Santa Monica Mountains Conservancy as the primary participants. The transaction involved the donation of 851 acres of land historically owned by Chevron, with the Conservancy purchasing another 2,184 acres.

This state park includes the 145-acre Ed Davis/Towsley Canyon Park at 24255 The Old Road in Newhall, the 3-mile Pico Canyon Trail, the 2.4-mile Rice Canyon Trail, and the 3.8-mile East Canyon Trail. The facilities at Towsley Canyon Park include trails for hiking, mountain biking, and equestrian uses; picnic areas; the Sonia Thompson Nature Center; the Towsley Canyon Lodge available for daily or overnight use; and restroom facilities.

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<sup>2</sup> City of Santa Clarita, *General Plan*. "Draft Conservation and Open Space Element." (2009).

## School Recreational Facilities

School facilities provide additional land and facilities for recreational use on a limited basis through a joint-use agreement between the County and school districts. For example, the County has agreements with Castaic Union School District and Saugus Union School District. Formal agreements for general public use of school facilities have been entered into by several school districts for additional usable acres. In general, school recreational facilities are open to the public during non-school hours. Elementary schools provide adjunct recreation opportunities to surrounding neighborhoods during non-education hours. Junior high schools and high schools provide adjunct community-wide facilities for public use.<sup>3</sup>

## Improved Park and Open Space Facilities

Parks and open space in the County's Planning Area contain a variety of recreational facilities. There are areas available for organized sports, including soccer fields, baseball diamonds, tennis courts, volleyball courts, basketball courts, and a skateboard park. Additionally, benches, picnic tables, and barbecues are available for informal recreation activities. Children's play areas are located within many parks to provide recreational opportunities. In addition to recreational facilities located in parks, the County's Planning Area also includes facilities such as nature centers, Conservancy lands, and camping sites provided for by the County, state, and private entities.

The Santa Clarita Woodlands, located in Towsley Canyon, was acquired by the Santa Monica Mountains Conservancy (SMMC) and contains the Ed Davis Park. Placerita Canyon Nature Center is a designated Natural Area and operated by the County of Los Angeles Department of Parks and Recreation. The park encompasses oak woodland and chaparral on the north side of the San Gabriel Mountains southeast of the City of Santa Clarita. The Castaic Lake Water Agency (CLWA) owns the Water Conservatory Garden and Learning Center and makes the Center available to the public. The Center is a community project dedicated to increasing water education and awareness in the Santa Clarita Valley.

## Proposed Parks and Recreational Facilities

It is anticipated that future dedications of parkland will be made from new developments within the County's Planning Area.<sup>4</sup> These future dedications and the planned parks listed below would count towards meeting the required standard of 3 acres of parkland per 1,000 residents (Quimby Act) and the goal of the Area Plan standard of 5 acres of parkland per 1,000 residents. As of October 2007, 15 County

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<sup>3</sup> City of Santa Clarita. *Santa Clarita Parks, Recreation and Open Space Master Plan*. (2009).

<sup>4</sup> OSAP 1-1.

maintained parks are proposed for the County's Planning Area, including nine neighborhood parks and six community parks. These parks are listed in **Table 3.16-2, Planned Park Lands**. Planned parks will add approximately 162.7 acres to the unincorporated County parkland inventory in the County's Planning Area.

**Table 3.16-2  
Planned Park Lands**

	<b>Acres</b>	<b>Classification</b>
Copper Creek Park	6.0	Neighborhood
Copperhill County Park	4.4	Neighborhood
Homestead	16.4	Community
Landmark (River Village)	9.7	Neighborhood
Legacy Village	20.4	Community
Mission Village	25.0	Community (20) Neighborhood (5)
Northlake County Park	15.0	Community
Pacific Crest Park	4.0	Community
Parkplace Park	13.9	Community
River Village County Park (2 sites)	20.9	Neighborhood
Sterling Gateway	7.1	Neighborhood
Summer Hill	4.9	Neighborhood
Whites Canyon	8.5	Neighborhood
Wickham Canyon	6.5	Neighborhood
<b>Total</b>	<b>162.7</b>	

*Source: City of Santa Clarita Parks, Recreation and Community Services Department 2007; County of LA Parks and Recreation Department 2007; Telephone communication, Larry Hensley, Los Angeles County Department of Parks and Recreation, February 5, 2009*

## Services

The County of Los Angeles maintains approximately 1,500 acres of parkland and related ancillary facilities within the OVOV Planning Area. The maintenance program consists of standard inspection and service of all buildings and parklands. Through their maintenance programs, each jurisdiction answers complaints regarding park facilities from the public. The complaints have ranged from graffiti removal to

facility and park repairs beyond normal service and maintenance. Facilities are designed to be as low maintenance and vandal-resistant as possible.

## **Recreation Programs**

The recreation and parks programs, usually run by private organizations (i.e., American Youth Soccer Association) are structured to meet the recreational interests of residents in the OVOV Planning Area. Adult and youth sports classes, day care, and after school programs, summer programs, special events, and aquatic programs are offered through the County Parks and Recreation Department. Cultural and recreational programs in the Santa Clarita Valley are conducted at many facilities, including neighborhood and community parks, the Senior Citizens Center, and local libraries.

## **Commercial Recreational Facilities**

Private facilities in the OVOV Planning Area include the Valencia Country Club and golf courses such as the Vista Valencia Golf Course, Robinson Ranch Golf Course, the TPC Golf Course, The Cascades, and The Greens. Six Flags Magic Mountain Amusement Park, Mountasia, and two paintball facilities are also located in the OVOV Planning Area. Other facilities, such as equestrian ranches and riding facilities are located in the County's Planning Area but serve all OVOV Planning Area residents.

## **Standards**

### ***Parks***

The County uses a standard of 5 acres of parkland per 1,000 residents as recommended by the Area Plan. The County also abides by the Quimby Act standard of requiring a minimum of 3 acres of parkland per 1,000 residents.<sup>5</sup> Local parkland includes special use, passive, neighborhood, and community parks. The existing ratio for the County's Planning Area is 19.8 acres of parkland per 1,000 residents.

## **State Parks and Recreation Areas**

There are two State Parks located within the OVOV Planning Area that are used by County residents: Castaic Lake Recreation Area and Placerita Canyon Natural Area. Castaic Lake and Placerita Canyon, which are state-owned parklands and operated by the County of Los Angeles Parks and Recreation Department, total approximately 9,041 acres.

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<sup>5</sup> California Government Code. Section 66477. "Quimby Act."

Angeles National Forest and Los Padres National Forest lands exist within and adjacent to the OVOV Planning Area. Some of the facilities in the national forests include hiking trails and campgrounds. Specifically, there are four trails located in the Angeles National Forest. Those include the Pacific Crest Trail, Fish Canyon Trail, Bear Canyon Trail and Gillette Mine Trail, all described in the **Trails** subsection, below.

### ***Castaic Lake State and County Recreation Area***

The 8,700-acre Castaic Lake State Recreation Area is a multi-use park located in the unincorporated area of Castaic, and it includes 2,600 surface acres of water contained in an upper and lower reservoir system. Castaic Lake reservoir and surrounding land is owned by the state; however, the County leases the land and operates the upper lake, Castaic Lake Reservoir, and the lower lake, Castaic Lagoon. Facilities at the upper lake include major boat ramps and supporting facilities with fishing, boating, water and jet skiing, and parking for boats and trailers. Development around the 180-acre Castaic Lagoon includes major picnic areas for groups and families, swimming beaches, parking areas, non-motorized boat facilities, and general day-use recreation facilities, such as comfort stations.

### ***Placerita Canyon Natural Area***

Placerita Canyon Natural Area is located east of the Antelope Valley Freeway and is accessible from Placerita Canyon Road. It contains a nature center, picnic areas, overnight and day camping facilities, a children's play area, hiking trails, and an equestrian campground.

## **Federal Land**

Angeles National Forest and Los Padres National Forest lands exist within and adjacent to the OVOV Planning Area. Some of the facilities in the national forests include hiking trails and campgrounds.

### ***Angeles National Forest***

The Angeles National Forest covers 693,000 acres of land area in the San Gabriel Mountains, which constitutes approximately one quarter of the land located within Los Angeles County. The US Forest Service administers the National Forest, which is an agency of the US Department of Agriculture. The Angeles National Forest is supervised in districts. The Angeles National Forest offers a wide range of camping (with fees) and picnicking facilities. In addition, there are hundreds of miles of trails in the forest, some of which are located within and adjacent to the OVOV Planning Area (see **Trails** below). There are four reservoirs in the Angeles National Forest, including Castaic and Pyramid Lakes (5 miles

northeast and 18 miles north of the site, respectively) providing water skiing, fishing, sail boarding, canoeing, jet skiing, and swimming activities. The water reservoirs charge entrance fees, as well as boat launching, boat rental, and overnight camping fees. In addition to the identified recreational opportunities, the Angeles National Forest provides a home for an array of wildlife. There are four trails that exist within Angeles National Forest:

- Pacific Crest Trail
- Fish Canyon Trail
- Bear Canyon Trail
- Gillette Mine Trail (County Trail)

### ***Los Padres National Forest***

The nearly 2 million-acre Los Padres National Forest is located primarily in the northern section of Ventura County. However, a portion of the Los Padres National Forest crosses the Los Angeles/Ventura County line, 8 miles north of State Route 126 (SR-126). Various recreation facilities are provided in the Los Padres National Forest, including hiking, equestrian, and off-road vehicle trails, and camping areas (with fees) accessible by road and trail. There are 57 dispersed trail camps, 19 developed family campgrounds, and 1 developed group campground. Many miles of recreation roads are utilized by visitors as scenic drives and used by off-highway vehicles. The forest has inventoried 374 miles of trails, including 18 miles of the Gene-Marshall-Piedra Blanca National Recreation Trail, which begins at Reyes Creek Campground and ends at Lion Campground. Other areas found in the Forest include the approximately 9,500-acre Dick Smith Wilderness and the 53,000-acre Sespe Condor Sanctuary (both located in Ventura County).

### **Trails**

Various state trails comprise part of the trail system within the OVOV Planning Area, which are maintained and operated by the County and the City of Santa Clarita. Each jurisdiction bears responsibility for trail operation within its jurisdictional boundaries. The Santa Clarita Valley Trails Advisory Council (SCVTAC) worked on revisions to the Master Plan of the regional trail system with the Los Angeles County Department of Parks and Recreation. Working in partnership with the SMMC and Rivers and Mountains Conservancy (RMC), the City and County have developed a system of parks, trails and preserve areas that form the Rim of the Valley Trail Corridor. The Rim of the Valley encompasses the Santa Clara River Valley in addition to the San Fernando, La Crescenta, and Simi Valleys.

The Rim of the Valley Trail is proposed to be 200 miles in length and is located within the Rim of the Valley Corridor. The trail, as proposed, is located on both public and private land. Much of the trail has not been constructed and remains as a proposed trail. Currently, only 10 miles have been acquired in the Santa Susana Mountains in addition to the 47-mile Backbone Trail located in the Santa Monica Mountains. The regional trail corridor is intended to ultimately connect the Santa Clarita communities and County unincorporated areas with diverse recreational opportunities in both the OVOV Planning Area and the surrounding region. The trail system is accessible to equestrians, hikers, joggers, and bicyclists. In addition to providing both leisure and practical commuting opportunities, trails can also protect and preserve access to regional recreational assets such as rivers, mountain areas and national and state forest areas. For a more detailed discussion on the County's Bikeway Master Plan, please refer to the **Transportation and Circulation** section of this environmental impact report (EIR).

Additionally, the trails in the OVOV Planning Area are part of a larger National Scenic trail system, the Pacific Crest Trail (PCT), which spans 2,650 miles from Mexico to Canada. The PCT lies west of the Angeles Crest National Scenic Byway and descends to Highway 14 at Agua Dulce, traversing the Sierra Pelona, and continuing north across the San Andreas Fault Zone where it climbs out of the OVOV Planning Area to the Sierra Nevadas.

### ***State Trails***

Two of the larger trails in the system are described below, followed by a listing of other state trails.

#### **Pacific Crest Trail**

This segment of the Pacific Crest Trail is 160 miles located along the Sierra Pelona Mountain Range, providing views of the Antelope Valley, various terrain, vegetation wilderness, and the San Gabriel Mountains. Campgrounds, picnic areas, and staging areas are available and managed by the United States Forest Service.

#### **Santa Clara River Trail**

The Santa Clara River has been designated as a Significant Ecological Area (SEA) and portions have been preserved as open space to provide flood protection.<sup>6</sup> The State of California recently adopted the Santa Clara River as a State Recreation Trail Corridor. Its preservation has allowed for the development of a

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<sup>6</sup> SCGP, Parks and Recreation Element/Open Space and Conservation Element, June 25, 1991.



30-mile-long multi-use trail following the river's banks from I-5, Valencia to Canyon Country, which is the backbone to the Valley's larger trail system.

Other County/State trails:

- William S. Hart Park Trail 2.8 miles
- Gavin Canyon Trail 8.0 miles
- Pico Canyon Trail 9.0 miles
- Sand Canyon Trail 4.0 miles
- Castaic Creek Trail 5.0 miles
- Castaic Lake Trail 2.0 miles
- Bouquet Canyon Extension Trail (Proposed) 7.0 miles
- Santa Clarita River Trail (Proposed) 8.0 miles
- Cliffie Stone Trail 1.0 miles
- Bouquet Canyon Trail 9.0 miles
- Placerita Creek Trail 6.0 miles
- Acton Community Trail 22.0 miles
- Northside Connector Trail 6.5 miles
- Vasquez Loop Trail 17.3 miles
- Hasley Canyon Trail 3.4 miles
- Mint Canyon Trail 3.7 miles
- South Fork Trail – Class I  
(City of Santa Clarita Trail) 4.0 miles

### ***County-Operated Trails***

Los Angeles County Riding and Hiking Trail systems can be seen in **Figure 3.16-2, Master Plan of Trails**, include the following trails in the County's Planning Area.

**Fish Canyon Trail (Forest Trail)**

The Fish Canyon Trail travels through the canyon along a year-round stream shaded by oak trees, sycamores, alders, and willows. The 6-mile trail passes through Castaic Lake County Regional Area and joins the Pacific Crest Trail. Campgrounds are available.

**Bear Canyon Trail (Forest Trail)**

Bear Canyon Trail crosses 5 miles of chaparral area over ridges and summits, through canyons, and eventually connects to the Pacific Crest Trail.

**Gillette Mine Trail (County Trail)**

The Gillette Mine Trail joins the Pacific Crest Trail after 1 mile of moderately difficult hiking through gold and silver mining ruins.

**Los Pinetos Trail (County Trail)**

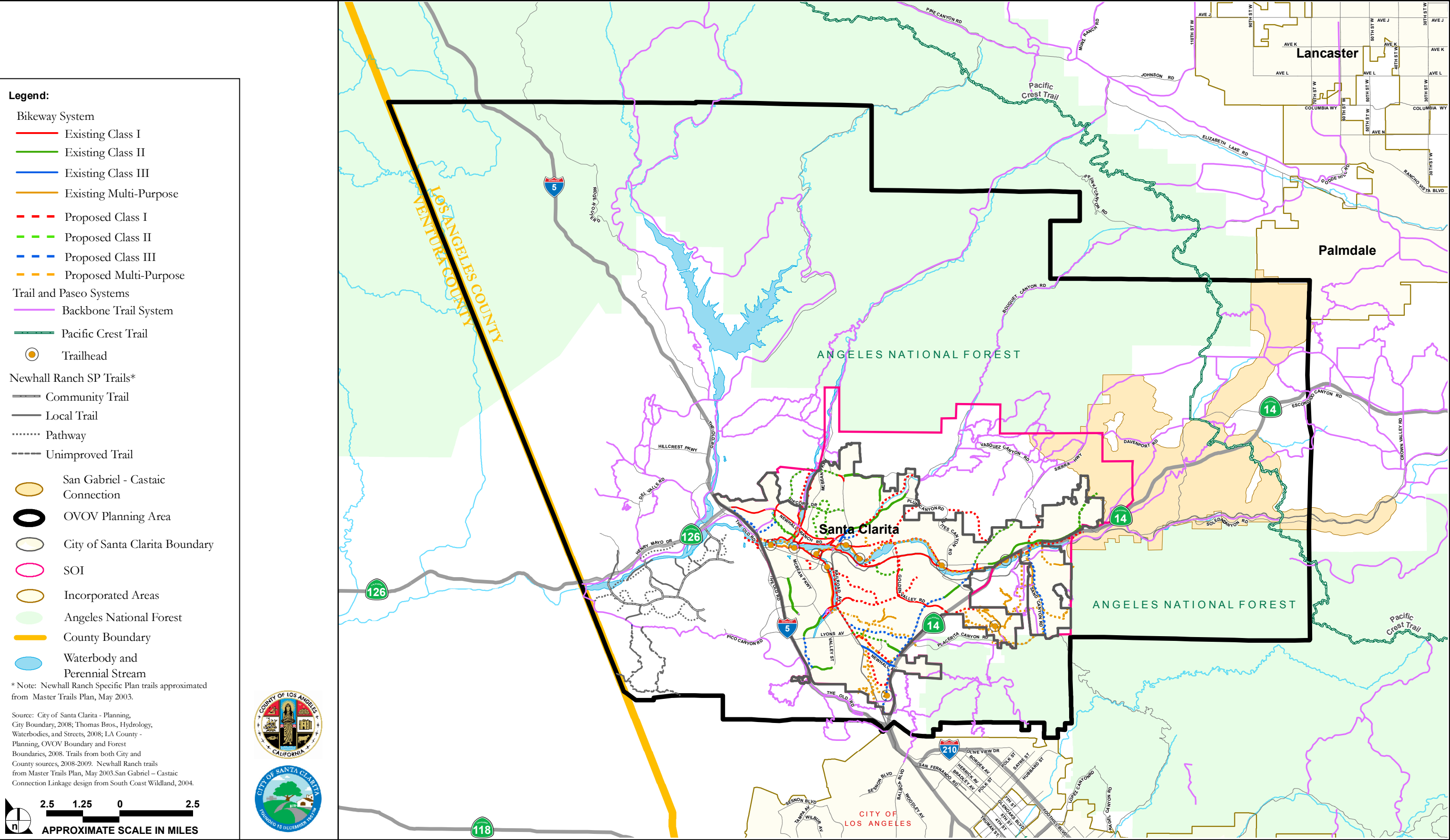
This is an equestrian trail with camping facilities available by reservation. The trail follows a flood control channel through 7 miles of natural area including Placerita Canyon State Park. The trail links to the Rim of the Valley State Trail from the proposed Placerita Canyon Trail.

**Wilson Canyon Channel Trail (County Trail)**

Two miles of moderately difficult hiking in the Angeles National Forest provides views of the San Fernando Valley and Placerita Canyon. This trail is a link to the Rim of the Valley State Trail via the Los Pinetos Trail.

**William S. Hart Park Trail (County Trail)**

This 2.5-mile nature trail winds through the park past the Hart Museum and designated points of interest including views of the OVOV Planning Area. Separate access is provided for equestrian use.



SOURCE: City of Santa Clarita, County of Los Angeles, Valleywide General Plan - August 2009

FIGURE 3.16-2

Master Plan of Trails

## REGULATORY SETTING

### State

#### *Quimby Act*

The Quimby Act<sup>7</sup> authorizes local agencies to establish an ordinance requiring new development to pay a fee or dedicate land for park and recreation facilities. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. To impose Quimby Act fees, the county or city must have a general plan or a specific plan that contains policies and standards for park facilities. Quimby Act fees must "bear a reasonable relationship" to the proposed subdivision. Counties and cities can use the Quimby Act fees only for developing new parks or rehabilitating parks that serve that subdivision.

The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act.<sup>8</sup> Under the Public Resource Code, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

As noted in the **Parks and Recreation** section of this EIR, the Quimby Act states that

*The dedication of land, or the payment of fees, or both, shall not exceed the proportionate amount necessary to provide three acres of park area per 1,000 persons residing within a subdivision, unless the amount of existing neighborhood and community park area, exceeds that limit, in which case the legislative body may adopt the calculated amount as a higher standard not to exceed five acres per 1,000 persons residing within a subdivision.*

This Quimby Act provision means that a county or city may have 3 acres of park space per 1,000 residents.<sup>9</sup>

### Local

#### *Santa Clarita Valley Area Plan (1984)*

The County adopted the Santa Clarita Valley Area Plan in 1984 with a comprehensive update in 1990 to address specific planning issues within the Valley. The Area Plan contained a Scenic Highways Plan and

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<sup>7</sup> California Government Code, Section 66477. "Quimby Act."

<sup>8</sup> County of Los Angeles Department of Parks and Recreation 1992

<sup>9</sup> California Government Code, Section 66477.

plans for Trails and Bikeways, along with goals and policies to promote preservation of open space and conservation of resources. Hillside development policies were included for areas with slopes of 25 percent or greater. The County has also adopted ordinances to regulate and protect natural resources, including native oak trees, water quality, significant ecological areas, and hillside development. In 2007 the County updated the Master Trails Plan for the Santa Clarita Valley, and has made numerous improvements to park and open space areas.

## ***Los Angeles County Municipal Code***

### **Design and Standards**

The subdivider of a residential subdivision shall provide local park space to serve the subdivision, pay a fee in lieu of the provision of such park land in accordance with the provisions of Section 21.28.140, provide local park space containing less than the required obligation but developed with amenities equal in value to the park fee, or do a combination of the above in accordance with the requirements of the County Code. For purposes of this ordinance, “local park space” may include, but shall not be limited to: publicly or privately owned playgrounds, riding and hiking trails, tennis, basketball or other similar game-court areas, swimming pools, putting greens, athletic fields, picnic areas, and other types of natural or scenic areas as recommended by the director of parks and recreation for passive or active recreation.<sup>10</sup>

Upon ascertaining the local park space obligation to be fulfilled by the subdivider of a residential subdivision pursuant to Section 21.24.340, the advisory agency shall review the proposed subdivision, the park and recreational needs of the future inhabitants of the subdivision, and existing or potential neighboring park and recreational facilities to determine whether all or any portion of the local park space obligation should be satisfied by the provision of park space to serve the subdivision. If the advisory agency determines that park space should be provided, the advisory agency shall advise the subdivider of the design and location of such space.<sup>11</sup>

### **Dedications**

If all or any portion of the local park space obligation for a residential subdivision is not satisfied by the provision of local park space designated by the advisory agency pursuant to Section 21.24.350, the following park fees shall be paid as a condition precedent to final approval of the subdivision: (1) A base

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<sup>10</sup> County of Los Angeles. Municipal Code. Section 21.24.340, “Residential Subdivisions-Local Park Space Obligation-Formula.”

<sup>11</sup> Ibid., Section 21.24.350, “Residential Subdivision-Provision of local park sites.”

fee equal to the local park space obligation derived from the equation set forth in Section 21.24.340, less the amount of park space, if any, provided by the subdivider pursuant to Section 21.24.350, times the representative land value for the appropriate park planning area, established as in the municipal code.<sup>12</sup>

## THRESHOLDS OF SIGNIFICANCE

The *State CEQA Guidelines* identifies certain criteria for determining whether any significant cultural resources will result with the implementation of the County Area Plan:

- Would the Area Plan increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and
- Does the Area Plan include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on existing parks and recreational facilities within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.15-1**                      **Would the Area Plan potentially increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.**

### Parkland

Growth and development in the County's Planning Area would increase the demand for some of the existing parks and recreational facilities and would also require the construction of new parks and new recreational facilities. It is not anticipated that substantial physical deterioration of existing facilities would occur with implementation of the proposed Area Plan (**Policies CO 9.1.6, CO 9.1.14**). Per **Table 3.16-2**, the County has planned for a combination of community and neighborhood parkland totaling 162.7 acres, which would supplement the County's existing parkland summarized in **Table 3.16-1 (Policies CO 9.1.1 through CO 9.1.3, CO 9.1.13)**.

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<sup>12</sup> Ibid., Section 21.28.140, "Park fees required when-Computation and use."

The County would strive to achieve equitable distribution of park, recreational, and trail facilities to serve all areas of the County's Planning Area. The County would ensure that priority be given to locations that are not now adequately served and that new parklands include a diversity of parks. This would minimize overuse of existing facilities and their substantial physical deterioration with buildout of the proposed Area Plan, particularly if construction of these parklands is phased to meet the needs of residents (**Policies CO 9.1.9, CO 9.1.14**).

Park locations should also consider potential adverse impacts on adjacent development from noise, lights, flying balls, traffic, special events, and other operational activities and uses as well as impacts on public safety and welfare (**Policies CO 9.1.11 and CO 9.1.12**). Additionally, construction, development, and acquisition of new parkland should be conducted to make available easily accessible park and recreation facilities throughout the Valley (**Policy CO 9.1.8**) and to provide a wide variety of recreational programs geared to all ages and abilities, including passive, active, educational, and cultural programs (**Policy CO 9.1.15**).

In conformance with the Quimby Act, the County's park fee ordinance requires dedication or payment of in-lieu fees for a minimum of 3 acres of parkland for each 1,000 residents. The proposed Area Plan's Open Space and Conservation Element calls for parks to be provided at a ratio of 5 acres per 1000 residents (**Policy CO 9.1.1**). Total parkland consists of neighborhood, community, and regional parks.

The current amount of total parkland (**Policy CO 9.1.2**) is 1,355 acres as seen in **Table 3.16-1**. The current population of the County's Planning Area is 75,000.<sup>13</sup> As described above the standard for the Quimby Act would require 225.0 acres of parkland to meet the existing population needs. The standard of the Area Plan requires 375.0 acres of total parkland. Therefore, the existing County Planning Area has sufficient acreage to accommodate the unincorporated area populations. **Table 3.15-2** designates 162.7 acres in planned local parkland for the County's Planning Area.

The projected population for the County's Planning Area at buildout would be 237,387 residents. Based on population projections and the Quimby Act requirements for parkland acreage, there would need to be 711 acres of parkland for the Quimby Act and, 1,185.5 acres to satisfy the Area Plan criterion. The amount of existing parkland, 1,355 acres, combined with the planned parks, an additional 162.7 acres, would total 1,517.7 acres. Consequently, the amount of parkland would be in a surplus for the Quimby Act standard and the Area Plan standard, as seen in **Table 3.16-3, Parkland Acreage Goal and Quantities**.

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<sup>13</sup> One Valley One Vision, Land Use Element, 2009.

**Table 3.16-3  
Parkland Acreage Goal and Quantities**

<b>Population</b>	<b>Existing Parkland (Ac)</b>	<b>Quimby Act (3 acres per 1,000)</b>	<b>Surplus or Deficit (-)</b>	<b>Area Plan (5 acres per 1,000)</b>	<b>Surplus or Deficit (-)</b>
2007					
75,000	1,355 <sup>1</sup>	225.0	1,130	375.0	980
Buildout (2030)					
237,387	1,517.7 <sup>2</sup>	711.0	806.7	1,185.5	332.2

<sup>1</sup> Based on the total from **Table 3.16-1**.

<sup>2</sup> Based on total from **Tables 3.16-1 and 3.16-2**.

Regional parkland acres are abundant in the County's Planning Area. The deficiency in neighborhood and community park acreage in the County's Planning Area may be compensated by the planned development of neighborhood and community parks and by proximity to neighborhood and community parkland in the City of Santa Clarita. In addition, the County is in the process of acquiring tax defaulted property of 2 acres or more for future neighborhood parks as a response to this need,<sup>14</sup> although providing smaller-sized parks presents maintenance issues (**Policy CO 9.1.14**) for the County, which prefers larger parks so staff can be on site and can limit their travel over large distances. The regional nature of the OVOV Planning Area provides the opportunity for a partnership between the County and City of Santa Clarita in maintaining, acquiring, and developing parkland (**Policy CO 9.13**, **Policy CO 9.1.4**, and **Policy CO 9.1.6**).

### Open Space

The open space located within the County's Planning Area is listed in **Table 3.16-1** and totals approximately 6,395 acres. (**Policy CO 10.1.7**). The open space designation also identifies and reserves land for both natural and active open space uses including the identified cultural and historical resources in **Section 3.8, Cultural Resources (Policy CO 10.1.4)**.

The designation of open space areas around and within the County's Planning Area maximizes use of areas not ideally suitable for development, such as slopes that are generally greater than 25 percent, areas designated as 100-year floodplains along the Santa Clara River (**Policy CO 9.1.7**), and any areas identified within the County's Code that would potentially pose an adverse impact to the risk of injury, life, and

<sup>14</sup> County of Los Angeles, Updated Santa Clarita Valley Area Plan, 2009.



loss to people and structures (**Policy CO 10.1.5** and **Policy 10.1.6**). The open space acquisition plan would pursue the planned open space and planned park areas to ensure that the edges of the OVOV Planning Area are buffered by a greenbelt (**Policy CO 10.1.10**). As listed in **Table 3.16-1**, the partnering of conservation agencies with other entities to acquire and maintain additional open space, where appropriate, will continue (**Policy CO 10.1.11** and **Policy 10.1.12**).

### **Development Projects**

The County will ensure the inclusion of adequate open space within development projects. **Policies CO 10.2.1** through **CO 10.2.5** encourage provisions of vegetated open space on a development project site (**Policy CO 10.2.1**), encourage that open space provided within development projects be usable and accessible (**Policy CO 10.2.2**), create development with shared amenities and green spaces where feasible (**Policy CO 10.2.3**); incorporate site features such as significant trees, vegetation, terrain, or water features (**Policy CO 10.2.4**), and allow density transfers and density-controlled development (clustering) in accordance with the provisions of the Zoning Ordinance to encourage retention of open space (**Policy CO 10.2.5**), provided that all residential lots meet the minimum lot size requirements of Community Standards District, where applicable.

### ***Proposed Area Plan Policies***

The proposed Area Plan includes the following policies to reduce or minimize the effects of future growth on parks and recreational facilities. As specified in these policies, new development shall also meet the parkland requirements as established by the Quimby Act and County enabling ordinances. Implementation of the proposed Area Plan policies related to parks and recreational facilities would minimize the effects of growth and development.

- |                         |  |
|-------------------------|--|
| <b>Policy CO 9.1.1:</b> | Common park standards shall be developed and applied throughout the Santa Clarita Valley, consistent with community character objectives, with a goal of five acres of parkland per 1,000 population. (Guiding Principle #36.a.) |
| <b>Policy CO 9.1.2:</b> | A range of parkland types, sizes, and uses shall be provided to accommodate recreational and leisure activities. (Guiding Principle #36.b)   |
| <b>Policy CO 9.1.3:</b> | Provide local and community parks within a reasonable distance of residential neighborhoods.   |

- Policy CO 9.1.4:** Explore and implement opportunities to share facilities with school districts, utility easements, flood control facilities, and other land uses, where feasible.
- Policy CO 9.1.6:** Continue to upgrade and expand existing facilities to enhance service to residents, including extension of hours through lighted facilities, where appropriate.
- Policy CO 9.1.7:** Establish appropriate segments of the Santa Clara River as a recreational focal point, encouraging a beneficial mix of passive and active recreational uses with natural ecosystems by providing buffers for sensitive habitat.
- Policy CO 9.1.8:** Make available easily accessible park and recreation facilities throughout the Santa Clarita Valley.
- Policy CO 9.1.9:** Ensure that new development projects provide a fair share towards park and recreational facilities, phased to meet needs of residents as dwelling units become occupied, pursuant to the Quimby Act (California Government Code Section 66477) and local ordinances as applicable.
- Policy CO 9.1.11:** Locate and design parks to address potential adverse impacts on adjacent development from noise, lights, flying balls, traffic, special events, and other operational activities and uses.
- Policy CO 9.1.12:** Establish minimum design standards for both public and private parks to provide for public safety and welfare through lighting, access, crime prevention through design, equipment, visibility, and other aspects of design.
- Policy CO 9.1.13:** Provide passive areas for natural habitat, meditation, bird-watching, and similar activities in parks, where feasible and appropriate, including meditation gardens, wildflower and butterfly gardens, botanic gardens, and similar features.
- Policy CO 9.1.14:** Ensure adequate park maintenance, and encourage programs for volunteers to assist in maintaining local parks, where feasible and appropriate.
- Policy CO 9.1.15:** Provide a wide variety of recreational programs geared to all ages and abilities, including passive, active, educational, and cultural programs.

- Policy CO 10.1.4:** Maintain and acquire, where appropriate, open space to preserve cultural and historical resources.
- Policy CO 10.1.5:** Maintain open space corridors along canyons and ridgelines as a way of delineating and defining communities and neighborhoods, providing residents with access to natural areas, and preserving scenic beauty.
- Policy CO 10.1.6:** Delineate open space uses within hazardous areas to protect public health and safety, which may include areas subject to seismic rupture, flooding, wildfires, or unsafe levels of noise or air pollution.
- Policy CO 10.1.7:** Acquire adequate open space for recreational uses, coordinating location and type of open space with master plans for trails and parks.
- Policy CO 10.1.10:** Support efforts by the City of Santa Clarita to ensure that the open space acquisition plan developed pursuant to the 2007 Open Space District formation conforms to the goals and objectives of the City's General Plan.
- Policy CO 10.1.11:** Partner with conservation agencies and other entities to acquire and maintain open space, combining funding and other resources for joint-use projects, where appropriate.
- Policy CO 10.1.12:** Identify, pursue, and ensure adequate funding sources to maintain open space areas.
- Policy CO 10.2.1:** Encourage provision of vegetated open space on a development project's site, which may include shallow wetlands and ponds, drought tolerant landscaping, and pedestrian hardscape that includes vegetated areas.
- Policy CO 10.2.2:** Encourage that open space provided within development projects be usable and accessible, rather than configured in unusable strips and left-over remnants, and that open space areas are designed to connect to each other and to adjacent open spaces, to the extent reasonable and practical.
- Policy CO 10.2.3:** Where feasible, integrate open space areas with neighboring uses and parcels, to create shared amenities and green spaces.

**Policy CO 10.2.4:** Seek opportunities to incorporate site features into the open space of a project design, which may include significant trees, vegetation, terrain, or water features, to provide thermal, acoustic, and aesthetic benefits.

**Policy CO 10.2.5:** Where appropriate, allow density transfers and density-controlled development (clustering) to encourage retention of open space, provided all residential lots meet the applicable minimum lot size requirements of a Community Standards Districts, where applicable

### ***Effectiveness of the Proposed Area Plan Policies***

The above policies will help ensure that the County's future residents would be provided with adequate parks and recreation facilities to meet the Quimby Act requirement of 3 acres of parkland per 1,000 residents and the Area Plan criterion of 5 acres of parkland per 1,000 residents. With the County's existing and planned parkland of 1,517.7 acres there would be a surplus of 806.7 acres of parkland for the Quimby Act requirement and a surplus of 332.2 acres for the Area Plan criterion. These policies require that new development, along with the guidance of the County, design, implement, and ensure that the potential future residents have adequate opportunities to be able to use the recreational facilities, parks, and trails. The incorporation of multi-use facilities, extended hours of operation, and joint-use between the County, City of Santa Clarita, and other agencies would ensure that County's future residents have adequate park space and adequate facilities. Additionally, policies require use of appropriate zoning tools to obtain adequate park and open land and require the County to identify and ensure adequate funding to maintain open space areas. With the acquisition of 200.1 acres of parkland over the buildout period, impacts on parks and recreational facilities would be less than significant, particularly if the acquisition for parks and recreation is coordinated with the County's growth and development.

### **Plan to Plan Analysis**

Buildout conditions under the existing Area Plan would require more parkland to meet the needs of the citizens of the County's Planning Area, per the Quimby Act. Under the existing Area Plan, the estimated number of residents in the County's Planning Area would be 270,000. Therefore, 810 acres of parks would be needed to satisfy the Quimby Act requirement of 3 acres per 1,000 residents. Under the proposed Area Plan, the estimated number of residents in the County's Planning Area would be 237,387. Therefore, 711 acres of parks would be needed to satisfy the Quimby Act requirement. Therefore, impacts on parks and recreation under the existing Area Plan would be greater than the proposed Area Plan.

**Impact 3.16-2                      Does the Area Plan include recreational facilities or require the construction or expansion of recreational facilities which might have a potential adverse physical effect on the environment.**

The demand on recreational facilities, such as sports fields and courts, will also increase with buildout of the proposed Area Plan. **Policy CO 9.1.5** promotes development of more playfields for youth sports activities, in conjunction with tournament facilities where needed. Optimizing opportunities to share facilities is provided in **Policy CO 9.1.4**. As the County Planning Area reaches buildout, there is an opportunity to meet the demand of recreational facilities within the planned parks. As projects are planned, their design will be refined in accordance with the anticipated demands on new athletic fields, community input, cost considerations, and the potential environmental impacts, at that time.

Depending upon the location and function of these new parks or trails, there is potential for park/trail construction or expansion to create adverse physical effects on the environment. The dedication of open space and the developer impact fees (i.e., the Quimby Act) would set aside funding to connect trails throughout the County Planning Area. These potential physical impacts on the environment would be mitigated on a project-by-project basis in order to meet the current guidelines.

**Figure 3.16-2, Master Plan of Trails** defines the current and proposed trail network locations within the OVOV Planning Area (**Policy CO 9.1.11, Policy 9.2.1, and Policy CO 9.2.6**). The County and City of Santa Clarita would work cooperatively with non-profit organizations to promote community involvement and to also enhance the community by encouraging volunteer work to adequately perform park maintenance (**Policy 9.1.14**).

The planned acquisition of natural open space would allow opportunities for residents of the County's Planning Area to bird watch or to enjoy potential botanical gardens (**Policy CO 9.1.13**). The Santa Clara River flows through the OVOV Planning Area, providing the opportunity to set aside additional open space for bikeways and trail development and for use as a passive recreational area (**Policies CO 9.1.7, 9.1.13, 9.2.3, 9.2.8**). This open space could incorporate trails that could connect with trails throughout the OVOV Planning Area and with state trails (**Policy CO 9.2.3 through Policy CO 9.2.7**). In conformance with State law, the implementation of the proposed Area Plan's Land Use Map and the policies in the Area Plan's proposed Open Space and Conservation Element would set aside areas for open space or public use (**Policy CO 10.1.15**) and that would ensure that development is consistent with the open space plan contained in that Element (**CO 10.1.16**). The designation of trails would be determined by the County, in cooperation with the state to implement the proposed Trails Master Plan (**Policy CO 9.2.8**).

Alternative energy projects in open space areas would be allowed if consistent with adjacent land uses (Policy 10.1.17).

### ***Proposed Area Plan Policies***

- Policy CO 9.1.5:** Promote development of more playfields for youth and adult sports activities, in conjunction with tournament facilities, where needed.
  
- Policy CO 9.2.1:** Plan for a continuous and unified multi-use trail network for a variety of users, to be developed with common standards, in order to unify Santa Clarita Valley communities and connect with regional and state trails such as the Pacific Crest Trail. (Guiding Principle #35)
  
- Policy CO 9.2.3:** Use the Santa Clara River as a major recreational focal point for development of an integrated system of bikeways and trails, while protecting sensitive ecological areas.
  
- Policy CO 9.2.4:** Ensure that new development projects provide trail connections to local and regional trail systems, where appropriate.
  
- Policy CO 9.2.5:** Promote the expansion of multi-use trails within rural areas of the Santa Clarita Valley.
  
- Policy CO 9.2.6:** Provide trails to scenic vistas and viewpoints.
  
- Policy CO 9.2.7:** Explore joint use opportunities to combine trail systems with utility easements, flood control facilities, open spaces, or other uses, where feasible.
  
- Policy CO 9.2.8:** Ensure that trails are designed to protect habitat, ecosystems, and water quality.
  
- Policy CO 10.1.15:** In conformance with State law, ensure that any action by which open space land is acquired or disposed of, restricted, or regulated, be consistent with the open space plan contained in this Element.
  
- Policy CO 10.1.16:** In conformance with State law, ensure that all development is consistent with the open space plan contained in this Element.
  
- Policy CO 10.1.17:** Allow alternative energy projects in areas designated for open space, where consistent with other uses and values.

### ***Effectiveness of the Proposed Area Plan***

The policies contained within the proposed Area Plan promote the development of adequate park space and recreational facilities for use by County residents through buildout of the Area Plan. The development and the connection of local, regional, and state trails would potentially give County residents multiple recreational options within the County's Planning Area. Implementation of the proposed policies would reduce potential impacts on park and recreational facilities provided adequate funding is available for the expansion of the park space and recreational facilities. With implementation of the above policies, potential impacts on parkland and recreational facilities would be less than significant and no mitigation would be required.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans require additional recreational opportunities throughout the community. As discussed above, the environmental impacts of any recreational facility is analyzed on a project-by project basis. Impacts for both Plans are similar.

### **MITIGATION FRAMEWORK**

No mitigations measures are required.

### **SIGNIFICANCE OF IMPACT WITH MITIGATION FRAMEWORK**

Implementation of the policies contained within the proposed Area Plan would reduce potential impacts on parkland and recreational facilities and/or services to less than significant. Additionally, these policies promote the use of open space thereby enhancing the recreational opportunities within the County's Planning Area.

## 3.17 UTILITIES AND INFRASTRUCTURE

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### EXECUTIVE SUMMARY

This section discusses solid waste, electricity, natural gas, and telecommunications within the County's Planning Area. The County's Planning Area consists of unincorporated land outside the City's boundaries and Sphere of Influence (SOI) but within the One Valley One Vision (OVOV) Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Both the County and the City Planning Areas comprise the OVOV Planning Area. This environmental impact report (EIR) section evaluates the effects of Area Plan buildout on utilities and infrastructure.

### Wastewater Treatment

With implementation of the proposed policies the potential impacts of the Area Plan's buildout on the wastewater treatment system capacity would be less than significant. As the County reaches its Area Plan buildout population of 237,387 residents, new projects would be evaluated for their potential impact on the capacity and effectiveness of the wastewater treatment system to treat additional sources of wastewater. The need for construction of new water or wastewater treatment facilities or expansion of existing facilities as buildout occurs would be determined by the Santa Clarita Valley Sanitation District (SCVSD). The SCVSD provides wastewater conveyance, treatment, and disposal services for residential, commercial, and industrial users in the County and the City of Santa Clarita. The construction of new facilities would be subject to California Environmental Quality Act (CEQA) review. No mitigation measures are required.

### Solid Waste

The County's Planning Area uses three landfills within or near the OVOV Planning Area. They include the Chiquita Canyon Landfill, Antelope Valley Landfill, and the Sunshine Canyon Landfill. Landfills throughout the state have permitted maximum capacities (the amount of waste[s] in tons or cubic yards a permitted facility is allowed to receive, handle, process, store, or dispose of). The County does not have adopted solid waste disposed figures and since the County's Planning Area is adjacent to and surrounding the City's Planning Area, it would be reasonable to assume that solid waste disposed figures for the County Area Plan would be similar to those of the City of Santa Clarita. Consequently, solid waste disposed figures used by the City of Santa Clarita are utilized for this analysis. In 2007, the amount of waste disposed by the City's Planning Area was 163,000 tons; therefore, the County's Planning Area waste disposed was approximately 48,512 tons. The projected buildout amount of waste, generated by



the County's Planning Area, would be approximately 129,210 tons per year. Nearby landfills are approaching full capacity for waste disposal and the projected amount of landfill capacity, for the County's Planning Area, would be in a shortfall of 22,626 tons per day, six days per week in the year 2021. Therefore, the impacts from buildout to the solid waste system would be significant and unavoidable even with the incorporation of **MM 3.17-1 to 3.17-5**.

### **Electricity, Natural Gas, and Telecommunications**

Southern California Edison (SCE) is the primary provider of electric service to the OVOV Planning Area. The two most prevalent energy conservation programs for the County include the Los Angeles Department of Water and Power (LADWP) "Green LA" program and the public education and outreach facilitated by the County Web site: [www.888CleanLA.com](http://www.888CleanLA.com). Other energy conservation programs include Title 24 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) measure enforced by the County's Building and Safety Division and energy conservation programs promoted by SCE and state agencies.

Natural gas service to the County's Planning Area is provided by the Southern California Gas Company (SCG). SCG operates numerous natural gas pipelines in the County's Planning Area. Gas service lines in the OVOV Planning Area range in size from 2- to 34-inch mains. In the eastern part of the OVOV Planning Area, a 30-inch gas line runs along the Santa Clara River. In the western portion of the Valley a 34-inch and a 22-inch main cross the river. Most of the transmission and distribution lines currently serving the OVOV Planning Area operate at a medium pressure of approximately 30 to 60 pounds per square inch (psi), except for those located in industrial areas where large natural gas users are prevalent and require higher-pressure lines.

Telephone service to the County's Planning Area is provided by AT&T and Verizon Communications. As development continues in the County's Planning Area, the telephone companies would provide additional system capacity and service connections. There are cellular towers located throughout the OVOV Planning Area.

Cable television service in the County's Planning Area is provided by Time Warner Cable, and AT&T and satellite television service in the County's Planning Area is provided by DirecTV, and Dish Network. Geographically, the east side of the Valley covering Canyon Country and parts of Saugus are served by Time Warner Cable. In addition to the cable television franchise with Time Warner in July of 2006, the Santa Clarita City Council executed a Public Benefits Agreement with AT&T that allows them to make competitive television service available for Santa Clarita Valley residents. AT&T began offering television

services to the Santa Clarita Valley in 2007 and is expected to serve up to roughly 30,000 homes in the OVOV Planning Area.

The proposed Area Plan includes policies to reduce or minimize the effects of the additional demand and consumption of electricity and natural gas associated with the prospective growth within the County's Planning Area. Implementation of the policies would reduce the effects of growth and development on energy resources. However, the proposed Area Plan policies do not provide concrete means of implementation and enforcement. Many policies lack performance standards that ensure appropriate actions and parameters would be achieved. Impacts on energy resources due to the additional demand for and consumption of electricity and natural gas associated with the prospective growth within the County's Planning Area can be further minimized through implementation of mitigation measures **MM 3.17-6** and **MM 3.17-7**. With implementation of these mitigation measures, potential impacts on electricity and natural gas would be less than significant.

The existing telecommunications services provided in the County's Planning Area includes telephone service, television service, and internet services. In order for the County to meet the demand of the residents at buildout, new utility corridors, or at least upgrades to these corridors, would need to be addressed. New facilities would be subject to CEQA and would use the best available technology to provide the needed services and to be able to meet state guidelines.

## WASTEWATER TREATMENT

### Summary

This section discusses the sanitary sewer collection and treatment system, and the wastewater reclamation system within the County's Planning Area. The OVOV Planning Area has two water reclamation plants (WRP). The Valencia WRP and the Saugus WRP had a combined average daily flow of 20.8 million gallons per day (mgd) as of March 2009. The total design capacity for both plants would reach 34.1<sup>1</sup> As buildout progresses, the Sanitation Districts of Los Angeles County (Sanitation Districts) would only allow for the permitted amount. Therefore, the proposed Area Plan policies would have a less than significant impact on the wastewater treatment system.

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<sup>1</sup> Sanitation Districts of Los Angeles County, Letter to Mr. Mitch Glaser, Los Angeles County Department of Regional Planning, June 22, 2009, from Ruth Glazen, Facilities Planning Department.

## Existing Conditions

### *Sewage Collection and Treatment*

The Santa Clarita Valley Sanitation District (SCVSD) (a consolidation of Sanitation Districts Nos. 26 and 32) provides wastewater conveyance, treatment, and disposal services for residential, commercial, and industrial users in the Santa Clarita Valley. The SCVSD operates two WRPs, the Saugus WRP and the Valencia WRP. These facilities are interconnected to form a regional treatment system known as the Santa Clarita Valley Joint Sewerage System (SCVJSS), which optimizes operating efficiencies of the wastewater treatment plants as solids and excess wastewater from the Saugus WRP are diverted to the Valencia WRP for treatment and disposal. The SCVJSS currently processes an average flow of 20.8 mgd.

### *Conveyance Systems*

The current SCVJSS service area consists of the surrounding unincorporated County areas and the City of Santa Clarita. The wastewater collection system is comprised of service connections that tie into a local collection line network. The local network, comprised of primary and secondary collectors, collects sewage flows directly from developments and discharges it into the Sanitation Districts sewer trunk lines. Approximately 34 miles of trunk sewers covering 11,210 acres of the Santa Clarita Valley make up the base of the SCVJSS conveyance network. From the sewer trunks, wastewater is discharged into water reclamation plants where it is treated. The Sanitation Districts are responsible for the construction and maintenance of trunk sewers. Flow levels and pipe condition are checked biennially. Local lines are owned and maintained by the Los Angeles County Consolidated Sewer Maintenance Districts within its borders.

The method by which facility expansion is funded is via connection fee. The Santa Clarita Valley Sanitation District's Connection Fee Program requires that prior to being connected to the system; a new user must pay for their fair share of the County Sanitation District's sewerage system expansion. In the case of an existing dwelling being connected, the owner would be responsible for the fee. For new development within the Sanitation District, the developer funds on-site sewer mains.

### *Treatment Facilities*

#### **Saugus Water Reclamation Plant**

The SWRP was built in 1962 at 26200 Springbrook Avenue, in the central portion of the OVOV Planning Area. The SWRP is a tertiary treatment plant and consists of comminution, grit removal, primary

sedimentation, activated sludge biological treatment, secondary sedimentation, coagulation, nitrification and denitrification, dual filtration, chlorination, and dechlorination. As there are no facilities for processing solids at the SWRP, all solids are conveyed by either trunk sewer or the waste activated sludge force main to the VWRP for processing.

Water reclaimed by the SWRP is dechlorinated and discharged into the Santa Clara River downstream of Bouquet Canyon Road. However, no future expansions are possible due to space limitations at the site. In 2008, the Saugus WRP produced an average effluent flow of 5.0 million gallons per day (mgd) or 5,600 acre-feet per year (afy).<sup>2</sup> Use of recycled water from this facility is permitted under Regional Water Quality Control Board (RWQCB) Order No. 87-49; however, Los Angeles County Sanitation District (LACSD) staff has expressed concern about diverting these discharges due to potential impacts to downstream habitat. Until more detailed habitat investigations are conducted, it is assumed that only recycled water from the Valencia WRP will be used. As of December 2007, there were no designated uses of this reclaimed water, other than discharge to the River.

### **Valencia Water Reclamation Plant**

The VWRP was built in 1967 at 28185 The Old Road, west of the Golden State Freeway (Interstate 5, or I-5) between the communities of Valencia and Castaic, in unincorporated Los Angeles County. This plant, unlike the SWRP, is a combined tertiary treatment plant and solids processing facility. As of 2008, treatment consisted of comminution, screening, grit removal, primary sedimentation, activated sludge biological treatment, secondary sedimentation, coagulation, dual filtration, chlorination, and dechlorination. The current capacity for treatment is 21.6 mgd with the current average daily flows of 15.7 mgd.<sup>3</sup> Wastewater solids generated by both the VWRP and SWRP are processed at the VWRP. The digested sludge that is a by-product of the treatment process is stored and then dewatered using plate and frame filter presses. Currently, the dewatered cake is transported off site for use in agricultural land application. This helps the County Planning Area meet the AB 939 recycling mandate.

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<sup>2</sup> Telephone communication between Ron Kettle, Valencia Water Reclamation Facility, and Chris Hampson of Impact Sciences. 8/11/08; One million gallons per day equals 1,120 acre feet per year; [http://www.irwd.com/MediaInfo/water\\_equivalents.php](http://www.irwd.com/MediaInfo/water_equivalents.php)

<sup>3</sup> Ibid., County Sanitation Districts of Los Angeles, *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR*, 1998.

### **Treatment Capacity and Average Flows**

As of 2009,<sup>4</sup> the permitted treatment capacity for the SCVJSS is 28.1 million gallons per day, with average daily flows of 5.1 mgd and 15.7 mgd at the SWRP and VWRP, respectively.

### ***Recycled Water***

Recycled water is obtained by treating and disinfecting municipal wastewater. The SCVSD provides wastewater conveyance, treatment, and disposal services for residential, commercial, and industrial users within its service area. Wastewater is collected by a system of local sewers and transported to trunk sewers that convey the wastewater to either the SWRP or the VWRP. Currently, the combined operating capacity of the Sanitation District's SWRP and VWRP treatment plants is 28.1 million gallons per day (mgd). During the fiscal year of 2006–2007, both plants produced 23,207 total acre-feet (af) of recycled water, 497 af of which was used for municipal recycled water purposes (landscape irrigation), or 2.14 percent of the total recycled water produced at the plants. As of fiscal year 2006–2007, the VWRP produced 0.4 mgd of recycled water for the Castaic Lake Water Agency (CLWA). The CLWA has an agreement with the Sanitation District to reuse up to 1,600 af per year (limited to 1.4 mgd) of recycled water.

### **Recycled Water Standards**

The allowed uses of recycled water depend upon the quality of the recycled water. The VWRP and SWRP produce a high-quality tertiary recycled water in accordance with California Code of Regulations Title 22 recycled water requirements for almost unrestricted non-potable reuse; however, certain applications of recycled water may require additional treatment prior to use. For example, reuse projects for the irrigation of salt sensitive agriculture or industrial process may require treatment to reduce Total Dissolved Solids (TDS), a measurement that generally expresses mineral levels within the water. The need for additional treatment is therefore dependant upon individual reuse applications. This in turn, depends on adequate funding to develop the necessary treatment facilities for each reuse project.

The California Regional Water Quality Control Board – Los Angeles Region (Regional Board) establishes numeric and qualitative requirements for recycled water discharged to receiving waters to protect

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<sup>4</sup> Sanitation Districts of Los Angeles County, [http://www.lacsd.org/about/wastewater\\_facilities/santa\\_clarita\\_valley\\_water\\_reclamation\\_plants/valencia.asp](http://www.lacsd.org/about/wastewater_facilities/santa_clarita_valley_water_reclamation_plants/valencia.asp), 2008.

groundwater and surface water quality. In addition to the state numerical values, there are general provisions imposed by the state on recycled water.<sup>5</sup> These provisions are that recycled water:

- Shall not result in colors, odors, or cause toxicity to humans, plants, or aquatic life;
- Must not cause a nuisance, mosquito problems, or damage structures or facilities;
- Must have received treatment equivalent to filtration to reduce turbidity;
- Must not contain trace constituents in concentrations exceeding California drinking water standards or action levels established by the Department of Health Services; and
- Must not cause a measurable increase in organic chemical contaminants in groundwater.

In accordance with the NPDES permits for the SWRP and VWRP, the SCVSD has implemented a receiving water monitoring program. In addition to two receiving groundwater monitoring locations, one for each plant, there are five receiving surface water-monitoring stations, these are:

- Station R-A—Located approximately 300 feet upstream of the SWRP discharge point
- Station R-B—Located approximately 100 feet downstream of the SWRP discharge point
- Station R-C—Located approximately 300 feet upstream of the VWRP discharge point
- Station R-D—Located approximately 300 feet downstream of the VWRP discharge point
- Station R-E—Located approximately 2 miles downstream of the VWRP discharge point

The NPDES permits specify that both quantitative and qualitative receiving water testing be performed to ensure the protection of the beneficial uses of the receiving water and the river ecosystem. The SCVSD conducts weekly, monthly, quarterly and annual monitoring of its recycled water and at the receiving water stations for a variety of water quality parameters to ensure water quality objectives are being met.

### **Recycled Water Demand**

CLWA's 2000 Urban Water Management Plan (UWMP) indicates that implementation of recycled water projects (including those planned for Newhall Ranch) could result in the use of up to 19,612 acre-feet of recycled water per year by 2010. Although it did not specifically state a projected 2007 demand, CLWA had approval for 1,600 af of recycled water use and was in the process of constructing the necessary facilities to deliver this amount at the time the 2005 UWMP was written. As indicated in CLWA's 2005

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<sup>5</sup> California Department of Public Health, Title 17 and Title 22 Code of Regulations, "Regulations Related to Recycled Water."

UWMP, approximately 448 af was served in 2004 to landscape irrigation customers, including the Westridge Golf Course.<sup>6</sup> Current demand is lower than originally predicted due to delays in the necessary environmental documentation and funding availability to expand the recycled water distribution system. The 2005 UWMP 2030 water use projections could potentially increase an additional 17,400 acre-feet per year as additional recycled water is produced. In order to provide an incentive to recycled water users, it was recommended in the Draft 2002 Recycled Water Master Plan that the CLWA issue a monthly rebate directly to each recycled water user. However, CLWA is currently considering utilizing a twofold approach to encourage recycled water use. CLWA plans on making recycled water available at a reduced rate and to work with the Los Angeles County and the City of Santa Clarita to adopt a Recycled Water Ordinance, mandating recycled use for certain applications. A Draft Ordinance is currently being developed. The reduced rate of water use projected as a result of the Recycled Water Ordinance Water is 8,700 af by year 2030 which would contribute to the 2030 water use projections for an additional 17,400 acre-feet per year. As of November 2006, Castaic Lake Water Agency was preparing a Recycled Water Master Plan that would address recycled water-related issues as they relate to future growth within the OVOV Planning Area. CLWA completed programmatic CEQA analysis in early 2007 for full implementation of the recycled water system as outlined in the Master Plan. CLWA is preparing the design of the second phase of the Recycled Water Master Plan that will take water from the SWRP and distribute it to identified users to the north, across the Santa Clara River and then to the west and the east, which will include service to Santa Clarita Central Park.

## ***Wastewater Conveyance and Biosolids***

### **Planned Improvements**

#### ***Saugus and Valencia WRPs***

Facility improvements for both the SWRP and VWRP were outlined in the *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR* (January 1998). These improvements were recommended based on per-capita wastewater generation rates through the year 2015. The improvements outlined below are proposed to incrementally increase wastewater treatment capacity from the current rate of 28.1 mgd to 34.1 mgd by 2015. To accomplish this, the SCVSD has implemented a plan to upgrade both treatment plants as detailed below.

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<sup>6</sup> Castaic Lake Water Agency, 2005 Urban Water Management Plan, Chapter 4: Recycled Water, 2005.

### ***SWRP and VWRP Upgrade***

The nitrification and denitrification modification was constructed at both the VWRP and SWRP in 2004. The implementation of the Santa Clara River Chloride Reduction Ordinance prohibits residents from owning salt-based water softeners within the Santa Clarita Valley. While removal of all these softeners will reduce the chloride discharged to the river, it does not eliminate the need to install some advanced treatment to meet discharge regulations. The Sanitation District is preparing a facilities plan and EIR for the facilities necessary to meet chloride requirements. These facilities are expected to include a 3 mgd micro-filtration reverse-osmosis system.

### ***VWRP Stage VI Expansion***

After completion of the Stage V expansion and the upgrades, Stage VI will involve a 6.0 mgd expansion of the facility on the undeveloped north portion of the VWRP property.

### ***Newhall Ranch Reclamation Plant***

Newhall Ranch development is proposed for an area approximately 11,963 acres in size. The development consists of 21,615 dwelling units, 67 acres of commercial development, 256 acres of business parks, and 630 acres of mixed-use development. To treat the wastewater generated by these proposed developments, the Newhall Ranch Specific Plan has proposed a new sanitation district and a new water reclamation plant. This plant would have a capacity of 6.8 mgd<sup>7</sup> to meet the wastewater needs of Newhall Ranch only.

### ***Reclaimed Water Projects***

In order to maintain flexibility in identifying the optimum wastewater conveyance management solution and, in turn reclaimed water production through the planning horizon, the Sanitation Districts will on a case-by-case basis evaluate the needs of the SCVJSS every two years, through 2015. The planned expansions and incremental additions to treatment facilities, as outlined above, are projected to increase wastewater treatment capacity to 34.1 mgd. Additionally, biosolids management will follow a similar management program, and look for alternative disposal options. CLWA has identified a number of potential users of recycled water in the future. Demands for recycled water are seasonal, with the highest demands occurring during the hot, dry summer months when irrigation requirements are greatest. CLWA estimates that the total potential annual recycled water demand that is cost effective to serve is

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<sup>7</sup> County of Los Angeles. "Chapter 4: Conservation and Open Space." *Preliminary Draft Santa Clarita Valley Area Plan*. 2008.



approximately 17,400 af per year. Implementation of the recycled water system is expected to occur over the next 25 years.<sup>8</sup>

## Regulatory Setting

The following statutes and regulations are specific for treated wastewater water quality. For a full discussion of all water quality regulations (some of which will apply to both treatment effluent and stormwater runoff) see **Section 3.13 (Water Service)** of this document.

### *Federal Regulations*

#### **Clean Water Act**

The objective of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act (CWA),<sup>9</sup> is to restore and maintain the chemical, physical, and biological integrity of the nation's waters by preventing point and nonpoint pollution sources, providing assistance to publicly owned treatment works for the improvement of wastewater treatment, and maintaining the integrity of wetlands.

#### **National Pollution Discharge Elimination System Permits**

The National Pollution Discharge Elimination System (NPDES) permit system was established in the CWA to regulate both point source discharges (a municipal or industrial discharge at a specific location or pipe) and nonpoint source discharges (diffuse runoff of water from adjacent land uses) to surface waters of the United States. For point source discharges, each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. The SWRP and VWRP are regulated by NPDES permits CA0054313 and CA0054216, respectively, and are renewed by the Los Angeles RWQCB every five years.

### *State Regulations*

#### **Title 22**

The California Water Code requires the Department of Health Services (DHS) to establish water reclamation criteria. In 1975, the DHS prepared Title 22 to fulfill this requirement. Title 22 defines four categories of recycled water:

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<sup>8</sup> County of Los Angeles. "Chapter 4: Conservation and Open Space." *Preliminary Draft Santa Clarita Valley Area Plan*. 2008.

<sup>9</sup> U.S. Code, Title 42, Sec. 1251, The Clean Water Act

- Undisinfected Secondary Recycled Water. Primary effluent that has been biologically oxidized;
- Disinfected Secondary-23 Recycled Water. Primary effluent that has been biologically oxidized and disinfected so that the 7-day median coliform bacteria level does not exceed 23 per 100 mL, with no more than one sample exceeding 240 per 100 mL in any 30-day period ;
- Disinfected Secondary-2.2 Recycled Water. Primary effluent that has been biologically oxidized and disinfected so that the 7-day median coliform bacteria level does not exceed 2.2 per 100 mL, with no more than one sample exceeding 23 per 100 mL in any 30-day period; and
- Disinfected Tertiary Recycled Water. Adequately, oxidized, coagulated, clarified, filtered disinfected effluent so that the 7-day median coliform bacteria level does not exceed 2.2 per 100 mL, with no more than one sample exceeding 23 per 100 mL in any 30-day period, and no sample exceeding 240 per 100 mL.

In addition to defining reclaimed water uses, Title 22 also defines requirements for sampling and analysis of effluent and requires specific design requirements for facilities. All treated wastewater in the OVOV Planning Area is treated to tertiary levels; water discharged to the Santa Clara River is also dechlorinated to meet more stringent NPDES standards.

#### **Porter-Cologne Water Quality Control Act**

The State Water Resources Control Board (SWRCB) and the RWQCBs are the principle state agencies with primary responsibility for the coordination and control of water quality. In the Porter-Cologne Water Quality Control Act<sup>10</sup> (Porter-Cologne), the California State Legislature declared that the “state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation.” Porter-Cologne grants the boards authority to implement and enforce water quality laws, regulations, policies, and plans to protect the state’s groundwater and surface waters.

#### ***Local Regulations***

##### **Water Reuse Permits**

In addition to the NPDES permits, the Saugus and Valencia WRPs have water reclamation requirements (reuse permits) issued by the Los Angeles Regional Water Quality Control Board (LARWQCB). These reuse permits contain limits that are consistent with specific water quality objectives of the Basin Plan.

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<sup>10</sup> State Water Resources Control Board, “Porter Cologne Water Quality Control Act” California Water Code, Division 7. Water Quality, effective January 1, 2008.

## Wastewater Ordinance

The provisions of this ordinance shall apply to all direct or indirect discharges, including the discharge of all wastewater, to any part of the sewerage systems of the districts, or to other sewerage systems tributary to the districts' sewerage system. The provisions of this ordinance shall also apply to wastewater originating outside the territorial boundaries of the districts or outside the boundaries of Los Angeles County if such wastewater eventually enters the districts' sewerage system. This ordinance among other things regulates sewer construction and provides for the approval of plans for sewer construction and implements federal and state pollution control regulations. This ordinance also provides for the issuance of permits including permits for industrial wastewater discharge, prohibits the discharge of certain wastes, and regulates the quantity and quality of other waste discharges. This ordinance imposes wastewater pretreatment requirements upon waste dischargers and provides for the regulation of the degree of such pretreatment. Lastly, this ordinance provides for the filing of wastewater treatment surcharge statements, imposes fees and charges, and provides for the distribution of revenue. Violations of this ordinance are subject to criminal fines and penalties, civil liabilities and other penalties in accordance with law.<sup>11</sup>

## Thresholds of Significance

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines*, Appendix G, identify criteria for conditions that may be deemed to constitute a substantial or potentially adverse change in physical conditions. Significant impacts on wastewater services would result if buildout of the proposed Area Plan would:

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

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<sup>11</sup> Sanitation Districts of Los Angeles County, "Wastewater ordinance," [http://www.lacsd.org/info/industrial\\_waste/wastewater\\_ordinance.asp](http://www.lacsd.org/info/industrial_waste/wastewater_ordinance.asp), 1998.

## Impact Analysis

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on existing wastewater facilities within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.17-1                      Buildout of the proposed Area Plan would potentially exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.**

Increases in population, housing, and commercial and industrial land uses would result in incremental increases in the generation of wastewater. Due to the projected growth, the increased generation of wastewater is considered substantial and may potentially result in a significant impact on existing wastewater service and facilities.

The current daily effluent flows of the SWRP and the VWRP are 5.1 mgd and 15.7 mgd, respectively. The SWRP and the VWRP have current design capacities of 6.5 and 21.6 mgd, respectively, for a total design capacity of 34.1 mgd. As described above in **(Planned Improvements)** the design capacity of both plants would increase to a capacity of 34.2 mgd and would have the capacity to be able to produce more reclaimed water for potential reuse **(Policies CO 4.2.1 and CO 4.2.2)**. As the County reaches its buildout population of 237,387 residents, new projects would need to be evaluated for their potential impact on the wastewater treatment system capacity before the start of construction **(Policy LU 9.1.1, Policy CO 4.2.2)**. Where deemed appropriate by the reviewing authority, new projects should promote means to enhance water quality by addressing sources of water pollution and by providing the extension of sanitary sewers for all urban uses and densities, to protect groundwater quality, where feasible **(Policy CO 4.4.4)**. Extension of sanitary sewers, where deemed appropriate, would help provide for the delivery of recycled water for use in irrigation. As buildout of the Area Plan occurs, the County should protect the capacity of the natural "green" infrastructure to cleanse water, and prevent flood and storm damage and promote more sustainable utilization of renewable resource systems **(Policy CO 1.1.1 and Policy CO 1.2.1)**.

### *Proposed Area Plan Policies*

**Policy LU 9.1.1:**                      Ensure construction of adequate infrastructure to meet the needs of new development prior to occupancy.

- Policy CO 1.1.1:** In making land use decisions, consider the complex, dynamic, and interrelated ways that natural and human systems interact, such as the interactions between energy demand, water demand, air and water quality, and waste management.
- Policy CO 1.2.1:** Improve the community's understanding of renewable resource systems that occur naturally in the Santa Clarita Valley, including systems related to hydrology, energy, ecosystems, and habitats, and the interrelationships between these systems, through the following measures:
- a. Through the environmental and development review processes, consider development proposals within the context of renewable resource systems and evaluate potential impacts on a system-wide basis (rather than a project-specific basis), to the extent feasible;
  - b. In planning for new regional infrastructure projects, consider impacts on renewable resources within the context of interrelationships between these systems;
  - c. Provide information to decision-makers about the interrelationship between traffic and air quality, ecosystems and water quality, land use patterns and public health, and other similar interrelationships between renewable resource systems in order to ensure that decisions are based on an understanding of these concepts.
- Policy CO 4.2.1:** In cooperation with the Sanitation District and other affected agencies, expand opportunities for use of recycled water for the purposes of landscape maintenance, construction, water recharge, and other uses as appropriate.
- Policy CO 4.2.2:** Require new development to provide the infrastructure needed for delivery of recycled water to the property for use in irrigation, even if the recycled water main delivery lines have not yet reached the site, where deemed appropriate by the reviewing authority.
- Policy CO 4.4.4:** Promote the extension of sanitary sewers for all urban uses and densities, to protect groundwater quality, where feasible.

### ***Effectiveness of Proposed Area Plan Policies***

Implementation of the proposed Area Plan policies related to wastewater would ensure adequate wastewater facilities as development occurs, thereby, reducing the effects of future development and

avoiding exceedances of wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board.

## Plan to Plan Analysis

The County's wastewater generation and treatment needs at proposed Area Plan buildout would need to be evaluated on a project-by-project basis for their potential impact on the capacity and effectiveness of the wastewater treatment system to treat the potential additional sources of wastewater. Due to the larger buildout population of the existing Area Plan, there would be potential for greater demand on existing and planned wastewater treatment facilities under the existing Area Plan. Therefore, impacts on wastewater would be greater with the existing Area Plan than those associated with the proposed Area Plan.

**Impact 3.17-2                      Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could potentially cause significant environmental effects.**

Increases in population, housing, and commercial and industrial land uses would result in incremental increases in the generation of wastewater. Due to the projected growth, the increased generation of wastewater is considered substantial and may potentially result in a significant impact on existing wastewater service and facilities.

The current daily effluent flows of the SWRP and the VWRP are 5.1 mgd and 15.7 mgd, respectively. The SWRP and the VWRP have current design capacities of 6.5 and 21.6 mgd, respectively, for a total design capacity of 34.1 mgd. As described above in **(Planned Improvements)** the design capacity of both plants would increase to a capacity of 34.2 mgd and would have the capacity to be able to produce more reclaimed water for potential reuse **(Policies CO 4.2.1 and CO 4.2.2)**.

As the County reaches its estimated buildout population of 237,387 residents, new projects would need to be evaluated for their potential impact on the wastewater treatment system before the start of construction **(Policy LU 9.1.1, Policy CO 4.2.2, and Policy CO 4.4.4)**. The need for construction of new water or wastewater treatment facilities or expansion of existing facilities as buildout occurs would be determined by the SCVSD. If new facilities were to be constructed, the project(s) would be required to undergo an environmental review per CEQA.

### ***Proposed Area Plan Policies***

All of the applicable proposed Area Plan policies are listed above.

### ***Effectiveness of Proposed Area Plan Policies***

Implementation of the proposed Area Plan policies related to wastewater would ensure adequate wastewater facilities as development occurs, requiring, if necessary, the environmental documentation on the effects of potential future construction.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans provide policies that would ensure for wastewater facilities and development occurs. Impacts to wastewater would be the same under both Plans.

**Impact 3.17-3                      Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

The current daily effluent flows of the SWRP and the VWRP are 5.1 mgd and 15.7 mgd, respectively. The SWRP and the VWRP have current design capacities of 6.5 and 21.6 mgd, respectively, for a total design capacity of 34.1 mgd. As described above in **Planned Improvements**, the design capacity of both plants would increase to a capacity of 34.2 mgd and would have the capacity to be able to produce more reclaimed water for potential reuse (**Policies CO 4.2.1 and CO 4.2.2**).

As the County reaches its estimated buildout population of 237,387 residents, new projects would need to be evaluated for their potential impact on the wastewater treatment system capacity before the start of construction (**Policy LU 9.1.1, Policy CO 4.2.2, and Policy CO 4.4.4**). The SCVSD will evaluate its capacity to provide service to existing commitments as well as new customers as the County reaches buildout.

### ***Proposed Area Plan Policies***

All of the applicable proposed Area Plan policies are listed above.

### ***Effectiveness of Proposed Area Plan Policies***

Implementation of the proposed Area Plan policies related to wastewater and the implementation of the objectives of the *Final 2015 Santa Clarita Valley Joint Sewerage System Facilities* would ensure adequate wastewater capacity to serve the buildout of the County's Planning Area.

## Plan to Plan Analysis

Both the existing and proposed Area Plans provide policies that would ensure for wastewater facilities and development occurs. Impacts to wastewater would be the same under both Plans.

## Mitigation Framework

No mitigation measures are required.

## Significance of Impact with Mitigation Framework

Implementation of the above proposed Area Plan policies would reduce potentially significant impacts on wastewater treatment systems to less than significant.

## SOLID WASTE

### Summary

This section describes solid waste management for the County's Planning Area, including the landfills that receive solid waste from the County, such as Chiquita Canyon landfill, Sunshine County/City Landfill, and Antelope Valley Landfill, and the existing capacity and expansion potential of these landfills. For purposes of this analysis it is reasonable to extrapolate that the adjacent and surrounding areas to the City of Santa Clarita produce the same amount of waste per year. In 2007, the amount of waste generated by the City's Planning Area was 163,000 tons.<sup>12</sup> By the year 2021, three landfills would close due to reaching the permitted capacity for waste. At buildout, the projected amount of waste generated by the County's Planning Area would be 200,909.2 tons per year or 550.4 tons per day.<sup>13</sup> Solid waste and recyclables that are generated within the County's Planning Area are collected, sorted, processed, sold, reused, and disposed of within and outside of the County's Planning Area. Private haulers collect the materials from homes, businesses, and public facilities in the County's Planning Area. Based on the 2008 Annual Report of the County of Los Angeles Countywide Integrated Waste Management Plan a Disposal Capacity Shortfall is expected to occur beginning in 2014 at landfills in the County of Los Angeles. The shortfall in capacity is estimated to be at 1,172 tons per day (tpd) beginning in 2014 and estimated to increase to 11,665 tpd in the year 2023. Development of proposed expansions and exporting up to 10,000 tpd of solid waste out of the County would not be able to meet the Daily

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<sup>12</sup> California Integrated Waste Management Board, Disposal Reporting System, "Jurisdictional Disposal by Facility," <http://www.ciwmb.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx>. 2008.

<sup>13</sup> Based on the 2008 waste per capita per day and the 237,387 buildout population of the OVOV County Area Plan.



Disposal Demand of the County. With implementation of the development in the OVOV County Planning Area, the estimated amount of solid waste that would be generated would contribute to the shortfall of capacity in the Los Angeles County landfill system. Therefore, the impacts from buildout to the solid waste system would be significant and unavoidable.

## Existing Conditions

Like many areas in Southern California, the County is faced with the continual annual increase in the generation of solid waste and diminishing disposal capacities. Construction and demolition debris materials account for almost 22 percent of the state's waste stream.<sup>14</sup> Through a construction and demolition (C & D) material education and recycling program, it is feasible to divert at least 60 percent of all C & D Material from construction, demolition, and renovation.<sup>15</sup>

### *Los Angeles County*

The Los Angeles County Department of Public Works (LACDPW) has the responsibility to develop plans and strategies to manage and coordinate the solid waste generated in the unincorporated areas of the County and address the disposal needs of Los Angeles as a whole. In the past, solid waste was simply collected and disposed of at landfills in the local vicinity.

The County of Los Angeles serves the Santa Clarita Valley as both a regional and local government entity. In its capacity as a regional government the County provides the following solid waste related services:

- Management and oversight of landfills
- Household hazardous waste drop-off events throughout the County but at least once per year in the OVOV Planning Area
- Regional planning for solid waste management facilities and capacity for growth in the future
- Education programs designed to reach everyone in the County
- Buy back centers
- Home composting demonstrations
- The County serves unincorporated areas in the OVOV Planning Area as a local or municipal government entity. In this role the County provides and manages the following services:
  - Regular trash removal from all properties in the County

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<sup>14</sup> California Integrated Waste Management Board, "Construction and Demolition Debris Recycling," <http://www.ciwmb.ca.gov/ConDemo/>. 2008.

<sup>15</sup> Ibid.

- Regular recycling of plastic, glass, steel, aluminum, yard waste and other materials
- Recycling reporting to the state for regulatory compliance

### ***Waste Reduction Programs***

The County provides free Household Hazardous Waste (HHW) collections to County residents approximately three to four times per month. The collection events occur in different locations throughout the County. Additional recycling facilities include a buy back center, beverage container vending machines at two locations, two recycling centers, and one drop-off location.

### **Los Angeles Regional Agency**

In early 2002 the City of Los Angeles invited all of the jurisdictions located in Los Angeles County to join a Regional Agency (RA). The intent of forming the RA was to simplify the annual AB 939 reporting process and to assist cities in moving away from concentrating their entire efforts on their diversion numbers and to allow them to concentrate more on the implementation of programs. The City of Los Angeles invited other cities to join them to form a RA so all of the members can benefit from the region's high diversion and generation rate.

### ***Solid Waste Disposal***

The County of Los Angeles currently has 13 active (fully operating) landfills within its boundaries where solid waste generated by the population in the County can be disposed. The following is a list of the active landfills located in Los Angeles County:

- Antelope Valley Landfill
- Burbank Landfill
- Calabasas Landfill
- Chiquita Landfill
- Lancaster Landfill
- Whittier Landfill
- Pebbly Beach Landfill
- Puente Hills Landfill
- San Clemente Landfill
- Scholl Landfill
- Sunshine City/County Landfill

The OVOV County Planning Area is served primarily by three Class III (nonhazardous) landfills:

- Chiquita Canyon Landfill

- Antelope Valley Landfill
- Sunshine City/County Combined Landfill

These landfill areas, located within or near the County's Planning Area, are shown in **Figure 3.17-1, Landfills Serving the OVOV Planning Area**. The County exports a majority of its OVOV Planning Area wastes to the Chiquita Canyon Landfill and the remainder of its wastes to the Antelope Valley Landfill and Sunshine City/County Combined Landfill in Sylmar.

For purposes of this analysis it is reasonable to extrapolate that the adjacent and surrounding areas to the City of Santa Clarita produce the same amount of waste per year. In 2007, the City of Santa Clarita disposed of 163,000 tons of waste in the year with a population of 176,168;<sup>16</sup> the per capita waste generation was 1,850.51 pounds for 2007, which equals 5.07 pounds per capita per day.<sup>17</sup> Using the same numbers from 2007, and the fact that the County Planning Area does not have its own solid waste generation figures, the County's Planning Area waste generation was 48,512 tons in 2007<sup>18</sup>, would be the same as or less than the amount generated by the City, due to the population of 75,000 residents. The County reports substantial progress in diverting waste from landfills with its solid waste management programs. In 1990, only 6 percent of solid waste was diverted and by 1998, 42 percent waste diversion was occurring. The City submitted a tonnage modification request for 1999 and 2000 to the California Integrated Waste Management Board. The Board accepted the City's request for a 49 percent diversion rate in 2005.<sup>19</sup> In 2006 the City's Planning Area diversion rate was 54 percent of waste disposal.<sup>20</sup>

Currently, most solid waste is disposed of in local landfills. Since 1997, the OVOV Planning Area has diverted from 44 to 51 percent through recycling efforts, in an increasing effort to meet the provisions of the California Integrated Waste Management Act (AB 939) to increase the diversion to 50 percent by year 2000 (discussed below). This diversion will increase the life expectancy of landfills, but not eliminate the need for new landfill space. As growth occurs throughout Southern California, new landfill space will

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<sup>16</sup> California Department of Finance, Table 2: E-4 Estimates for Cities, Counties, and State, 2001-2008, 2008.

<sup>17</sup> The per capita waste generation number was determined by  $169,170.2 * 2,000$  pounds [lbs; (1 ton = 2,000 pounds)], 338,340,400 pounds. Divide by the population to = 1,920.56 pounds per person. Divide that number by 365 days in a year to get 5.26 pounds per capita per day.

<sup>18</sup> The 5.26 pounds of waste per capita per day multiplied by County's Planning Area population = 394,500 pounds. Multiply that by 365 days in a year and then divide by 2,000 (lbs in a ton) to equal 71,997 tons of waste in 2007.

<sup>19</sup> California Integrated Waste Management Board, "Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report," <http://www.ciwmb.ca.gov/LGTools/mars/JurDrSta.asp?VW=In>, 2009.

<sup>20</sup> Michelle Lovato, "Garbage: What a terrible waste", Santa Clarita Valley The Signal, Tuesday December 30, 2008, A1 and A6.

need to be developed and maximized and/or other waste disposal alternatives will need to be implemented.

It is extremely speculative to identify specific options that will be implemented to dispose of solid waste 20, 50, or 100 years from now. The Los Angeles County *Countywide Integrated Waste Management Plan*, which demonstrated how the jurisdiction would meet the Integrated Waste Management Act's mandated diversion goals of 25 percent by January 1, 1995, and 50 percent on and after January 1, 2000, noted that regional competition for ever-scarce landfill space makes planning uncertain. New capacity is highly problematic, reflecting a series of individual siting decisions as opposed to a comprehensive strategic choice. The County has adopted strategies to address solid waste needs:

- To provide the needed disposal capacity, the Siting Element identified areas/sites Countywide which may be potentially suitable for development of new/expansion of Class III landfills.
- The Siting Element also identified out-of-County landfills that may be available to receive waste generated in the County.
- Additionally, the Siting Element includes goals and policies to facilitate the use of out-of- County/ remote landfills and foster the development of alternatives to landfill disposal. The County is currently updating the Siting Element, which is estimated to be completed in 2010.

Solid waste collected within the unincorporated areas of northern Los Angeles County are by private haulers and taken to Chiquita Canyon Landfill, Sunshine City/County Combined Landfill or the Antelope Valley Landfill in Palmdale. The Lancaster Landfill in Lancaster, Simi Valley Landfill in Simi Valley, and the Toland Road Landfill in Ventura County could all conceivably accept waste from the County's Planning Area and are included in this discussion for that reason. Currently, the Toland Road Landfill is restricted to receiving wastes that originate from designated transfer stations in Ventura County only. Several of the landfills identified have the potential to be expanded in order to provide additional capacity. Of these landfills, Chiquita Canyon and Lancaster landfills, have active proposed expansion plans. Chiquita Canyon and Lancaster landfills could serve the County's Planning Area. **Table 3.17-1, Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County**, identifies the anticipated remaining capacity and anticipated remaining years of operation of each landfill.<sup>21</sup>

Waste diversion will increase the life expectancy of landfills, but not eliminate the need for new landfill space. On August 29, 2000, the County Sanitation Districts (CSD), a consortium of 78 cities and the County of Los Angeles signed agreements to purchase the Eagle Mountain Landfill in Riverside County,

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<sup>21</sup> County of Los Angeles, 2006 *Annual Report for the Los Angeles County Countywide Siting Element*, 2006.

which is subject to resolution pending litigation,<sup>22</sup> and the Mesquite Regional Landfill in Imperial County. Solid waste from the CSD would be transported to land proposed for landfills by rail.

## Regulatory Setting

### *State Regulations*

#### **California Integrated Waste Management Act**

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction would meet the mandatory state waste diversion goals of 25 percent by the year 1995 and 50 percent by the year 2000. The purpose of AB 939 is to “reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible.” Noncompliance with the goals and timelines set forth within AB 939 can result in fines up to \$10,000 per day on jurisdictions (cities and counties) not meeting the recycling and planning goals.

With the passage of SB 1016 (Solid Waste Disposal Measurement Act of 2008), jurisdictions of the state are still required to divert waste at a rate equal to or greater than 50 percent. But rather calculate a straight percentage value, the diversion rate is now based on the amount of tons of waste disposed per person per day.

The term “integrated waste management” refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 established a waste management hierarchy as follows:

- Source Reduction
- Reuse
- Recycling
- Composting
- Transformation
- Disposal

As of June 2008, neither the California Integrated Waste Management Board nor the State Legislature has introduced new legislation to set diversion requirements beyond 2000.

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<sup>22</sup> Los Angeles County. “Chapter 9: Public Services and Facilities Element.” *Draft General Plan*. 2008.

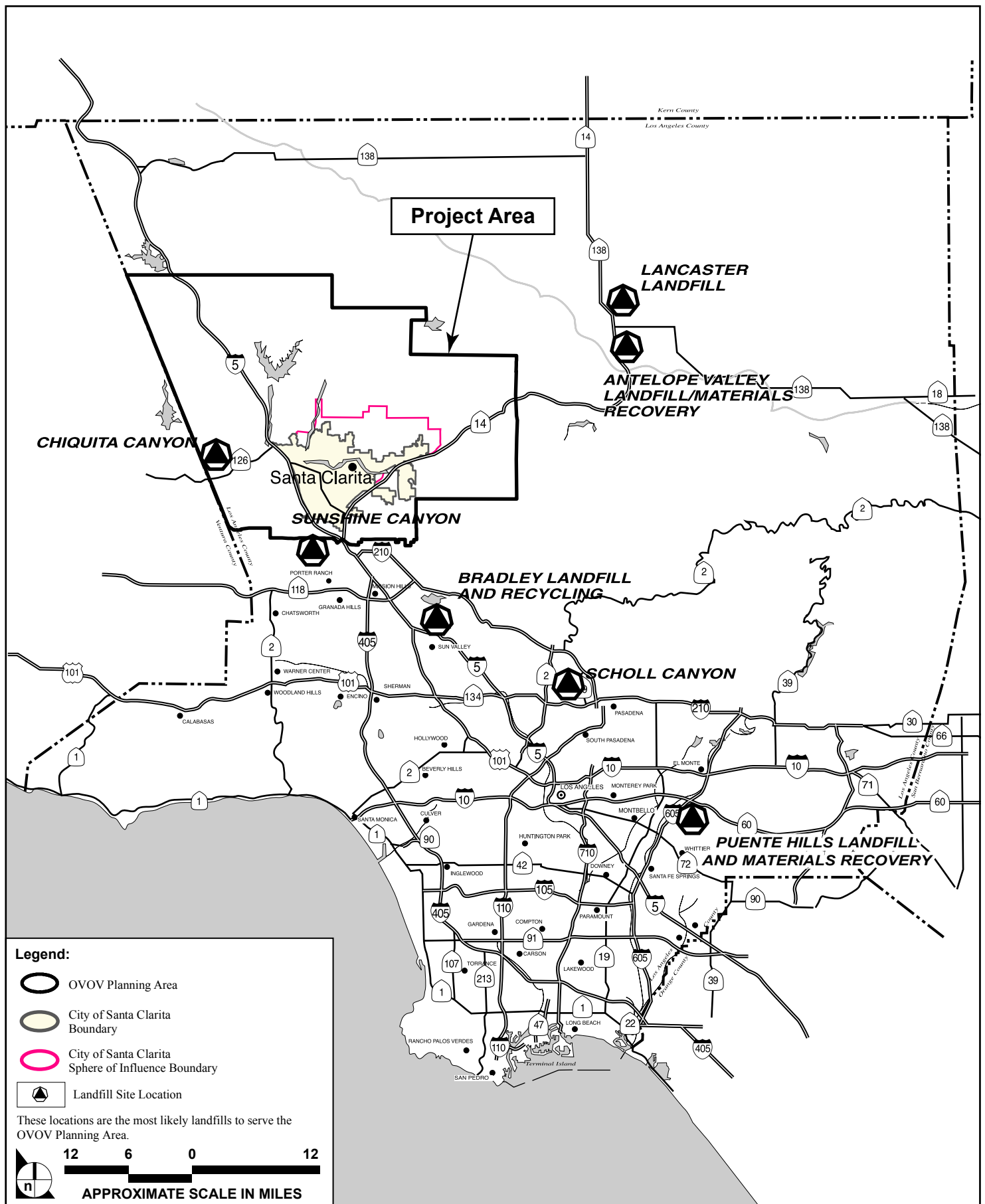


FIGURE 3.17-1

Landfills Serving the OVOV Planning Area

Table 3.17-1  
Existing Landfill Capacity and Regional Needs Analysis for Los Angeles County

Year	Waste Generation	Diversion Rate (percent)	Total Daily Disposal Demand	Imports from Other Counties	Exports to Out-of-County Disposal Facilities	Daily Available Capacity from Transformation Facilities	Class III Landfill Daily Disposal Demand	1	2	3	4	5	6	7	8	9	10	11	12	13	Total	Class III Landfill Daily Disposal Capacity Shortfall (Reserve)	
								IN-COUNTY CLASS III LANDFILLS															
								Antelope Valley	R Burbank	R Calabasas	Chiquita	Lancaster	Pebbley Beach	L Puente Hills	R San Clemente	R Scholl	W Sunshine County	W Sunshine City	W Sunshine City/County Combined	R Whittier	Daily Available Capacity <sup>2</sup> from Class III Landfills		
								Maximum Permitted Daily Capacity (tpd-6) Expected Average Daily Tonnage (tpd-6)															H
	A	B	C	D	E	F	G=C+D-E-F	Remaining Capacity at Year's End (Million Tons)															(tpd-6)
2008	73,670	55	33,152	667	6,135	1,669	25,347	1800 970 7.7	240 132 2.0	3500 1096 7.8	5000 4756 8.0	1700 1123 2.1	49 10.1 0.06	13200 9975 19.9	10 0.98 0.04	3400 1082 5.7	6000 3771 E	5000 2178 E		350 252 4.2	35,274.3	(9,927)	
2009	71,694	55	32,262	900	7,500	2,069	23,593	1800 903 7.5	240 123 3.0	3500 1020 7.5	5000 4427 6.6	1700 1045 1.6	49 9 0.05	13200 9284 15.8	10 0.91 0.04	3400 1007 5.3			11000 5538 81.3	350 235 4.1	35,096.2	(11,503)	
2010	71,865	55	32,339	900	7,500	2,069	23,670	1800 906 15.9 E	240 124 2.9	3500 1024 7.2	5000 4441 37.2 E	1700 1049 1.1	49 9 0.05	13200 9315 11.7	10 0.91 0.04	3400 1011 5.0			11000 5556 79.5	350 236 4.0	35,104.0	(11,434)	
2011	73,751	55	33,188	900	7,500	2,069	24,519	3600 938 15.6	240 128 2.9	3500 1060 6.8	5000 4601 35.8	3000 1086 12.3	49 10 0.05	13200 9649 7.6	10 0.95 0.04	3400 1047 4.7			11000 5755 77.7	350 244 3.9	38,290.2	(13,772)	
2012	76,811	55	34,565	900	7,500	2,069	25,896	3600 991 15.3	240 135 2.8	3500 1120 6.5	5000 4859 34.3	3000 1147 12.0	49 10 0.05	13200 10191 3.4	10 1.00 0.04	3400 1106 4.4			11000 6078 75.8	350 258 3.8	38,430.0	(12,534)	
2013	80,280	55	36,126	900	7,500	2,069	27,457	3600 1050 14.9	240 143 2.8	3500 1187 6.1	5000 5152 32.7	3000 1216 11.6	49 11 0.04	13200 10805 C	10 1.06 0.04	3400 1172 4.0			11000 6445 73.8	350 273 3.8	38,588.6	(11,132)	
2014	83,620	55	37,629	900	10,000	2,069	26,460	3600 3600 13.8	240 138 2.8	3500 1144 5.8	5000 5000 31.1	3000 3000 10.7	49 11 0.04		10 1.02 0.04	3400 1130 3.6			11000 11000 70.4	350 263 3.7	25,287.3	1,172	
2015	86,572	55	38,958	900	10,000	2,069	27,788	3600 3600 12.7	240 145 2.7	3500 1202 5.4	5000 5000 29.6	3000 3000 9.7	49 11 0.04		10 1.07 0.04	3400 1186 3.3			11000 11000 67.0	350 277 3.6	25,422.3	2,366	
2016	89,548	55	40,297	900	10,000	2,069	29,128	3600 3600 11.6	240 152 2.7	3500 1260 5.0	5000 5000 28.0	3000 3000 8.8	49 12 0.03		10 1.12 0.04	3400 1244 2.9			11000 11000 63.5	350 200 3.5	25,558.3	3,569	
2017	92,329	55	41,548	900	10,000	2,069	30,379	3600 3600 10.4	240 159 2.6	3500 1314 4.6	5000 5000 26.4	3000 3000 7.9	49 12 0.03		10 1.17 0.04	3400 1297 2.5			11000 11000 60.1	350 302 3.4	25,685.3	4,693	
2018	95,143	55	42,815	900	10,000	2,069	31,645	3600 3600 9.3	240 165 2.6	3500 1369 4.1	5000 5000 24.9	3000 3000 6.9	49 13 0.02		10 1.22 0.04	3400 1351 2.1			11000 11000 56.7	350 315 3.3	25,814.0	5,831	
2019	98,015	55	44,107	900	10,000	2,069	32,938	3600 3600 8.2	240 172 2.5	3500 1424 3.7	5000 5000 23.3	3000 3000 6.0	49 13 0.02		10 1.27 0.04	3400 1406 1.6			11000 11000 53.2	350 328 3.2	25,945.2	6,992	
2020	100,896	55	45,403	900	10,000	2,069	34,234	3600 3600 7.1	240 179 2.4	3500 1480 3.2	5000 5000 21.8	3000 3000 5.0	49 14 0.02		10 1.32 0.04	3400 1462 1.2			11000 11000 49.8	350 341 3.1	26,076.9	8,157	
2021	103,681	55	46,656	900	10,000	2,069	35,487	3600 3600 6.0	240 185 2.4	3500 1535 2.8	5000 5000 20.2	3000 3000 4.1	49 14 0.01		10 1.37 0.04	3400 1515 0.7			11000 11000 46.4	350 350 3.0	26,200.8	9,287	
2022	106,555	55	47,950	900	10,000	2,069	36,781	3600 3600 4.8	240 192 2.3	3500 1591 2.3	5000 5000 18.6	3000 3000 3.2	49 15 0.006		10 1.42 0.03	3400 1570 0.2			11000 11000 42.9	350 350 2.9	26,319.3	10,461	
2023	109,500	55	49,275	900	10,000	2,069	38,106	3600 3600 3.7	240 199 2.3	3500 1648 1.8	5000 5000 17.1	3000 3000 2.2	49 15 0.0017		10 1.47 0.03	3400 1627 C			11000 11000 39.5	350 350 2.8	26,440.7	11,665	

1. Waste Generation is estimated using the Waste Board’s Adjustment Methodology, utilizing population projection, employment, and taxable sales projections from UCLA.

2. **Daily Available Capacity**, in bold text, is based on Maximum Permitted Daily Capacity for facilities without a restricted watershed or Expected Average Daily Tonnage for facilities with a restricted watershed.

C- Closure due to exhausted capacity/permit expiration; E – Expansion becomes effective; L – Does not accept waste from the City of Los Angeles and Orange County; R – Restricted watershed; W – Does not accept waste from jurisdictions outside the County of Los Angeles.

Source: County of Los Angeles Department of Public Works, Countywide Summary Plan and Countywide Siting Element, County of Los Angeles Countywide Integrated Waste Management Plan 2008 Annual Report, October 2009, Appendix E-3, Table 3.

## ***Local Regulations***

### **Construction and Demolition Debris Recycling and Reuse Ordinance**

The County of Los Angeles Board of Supervisors adopted the Construction and Demolition Debris Recycling and Reuse Ordinance on January 4, 2005. The Ordinance added Chapter 20.87 to the Los Angeles County Code, which requires projects in the unincorporated areas to recycle or reuse 50 percent of the debris generated. Its purpose is to increase the diversion of construction and demolition debris from disposal facilities and will assist the County in meeting the State of California's 50 percent waste reduction mandate.

### **Los Angeles Countywide Siting Element**

In 1997, the County of Los Angeles<sup>23</sup> prepared a Countywide siting element that estimates the amount of solid wastes generated in the County and proposes various diversion and alternate disposal options. The Los Angeles Countywide Siting Element identifies the Department of Public Works as the responsible agency to develop plans and strategies to manage and coordinate the solid waste generated (including hazardous waste) in the County unincorporated areas and to address the disposal needs of Los Angeles County as a whole. The Siting Element is based upon the traditional practice of simply collecting solid waste and disposal at landfills in the local vicinity. Therefore, currently many jurisdictions (such as the County of Los Angeles) are stating that existing local landfill space may reach capacity in the very near future.

### **Thresholds of Significance**

The *State CEQA Guidelines* identify certain criteria for determining whether any significant impact will result with the implementation of the Area Plan. The impacts would be considered significant if the project would not

- be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and
- comply with federal, state, and local statutes and regulations related to solid waste.

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<sup>23</sup> Los Angeles County. 2006 *Annual Report for the Los Angeles County Countywide Siting Element*. 2006.



## *Impact Analysis*

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on existing solid waste within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.

**Impact 3.17-4                    The County's Planning Area would be served by landfills with sufficient permitted capacity to accommodate solid waste disposal needs.**

Generation of solid waste would increase as the population increases with buildout of the Area Plan. Correspondingly, there would be a need for additional landfill capacity and related support facilities. This impact is considered substantial and would result in a significant impact on existing solid waste facilities. As mentioned earlier, the County's Planning Area waste numbers can be extrapolated from the City's Planning Area numbers because the County area is adjacent to and surrounds the City's Planning Area.

With the promotion and development of recycle buy-back centers in the OVOV Planning Area, the use of recycled materials would increase. The development and use of these facilities would reduce demand on local landfills (**Policy LU 9.1.7**). The development and implementation of public programs for the County's Planning Area would also help promote the reuse of waste materials and the conservation of non-renewable materials (**Policy CO 1.3.3**). Use of waste transfer stations, the promotion of recycling, and reuse of materials would reduce the amount of waste that local landfills would receive on a daily basis (**Policy CO 8.4.1 through CO 8.4.7, and Policy LU 9.1.7**). Programs already implemented by the County and City of Santa Clarita are consistent with encouraging and promoting the locations of a materials recovery facility (MRF) within the County's Planning Area (**Policy CO 8.4.1**). New development in the County's Planning Area would implement adequate space for recycling receptacles and bins on site (**Policy LU 7.4.1**). The encouragement and enforcement of commercial and industrial recycling is consistent with the programs and policies that are already being implemented by the County and the City of Santa Clarita, such as hazardous waste collection programs (**Policy CO 1.4.4**). Consistent with a C & D material education and recycling program, it is feasible to reuse Building Code standard C & D material for new construction (**Policy LU 7.4.2**).

The promotion of soil enhancement and waste reduction through composting would help alleviate the demand on local landfills (**Policy CO 2.1.3**). It is the County's task to adopt mandatory residential recycling programs and for allowing and encouraging the composting of greenwaste.

The projected estimated buildout of the County's Planning Area is 237,387. By buildout, and based on the data presented above in Solid Waste Disposal, the predicted amount of waste produced by the County's

Planning Area would be 550.4 tons per day or 209,909.2 tons per year. As buildout within the OVOV Planning Area increases, existing landfill capacity will need to be expanded, pending acceptance of permits, to allow for the increased generation of solid waste. If the permits are accepted, then surrounding land uses would need to be compatible with landfill facilities. Proper land use designations and zoning would minimize impacts from the expansion of landfills. Information provided in **Table 3.17-1** projects that the following landfills would close on their respective estimated closing dates:

- Puente Hills landfill, projected closure in 2012; and,
- Scholl landfill, projected closure in 2023

Landfills that would have permits allowing for expansion are:

- Antelope Valley landfill, expansion to a capacity of 17.2 million tons in 2010
- Chiquita Canyon expansion to capacities of 36.8 in 2010
- Lancaster landfill, expansion to a capacity of 11.0 million tons in 2011

Antelope Valley, Chiquita Canyon and Lancaster landfills would be able to meet the demands of the County's Planning Area, if necessary, for a small period of time before the landfills eventually fill up. Transportation of solid waste to landfills outside the County is a potential possibility if the County landfills approach capacity (**Policy LU 9.1.6**). The expansion of Chiquita Canyon, which is expected to be permitted and opened by the year 2010, would allow for 38.4 million tons of capacity for waste disposal.

The planned landfill expansions, potential use of landfills outside the County landfill, and the reduction of solid waste through the mentioned programs and policies would reduce impacts on solid waste systems. However, impacts on solid waste would remain unavoidable and significant.

### **Proposed Area Plan Policies**

- Policy LU 7.5.1:** Ensure that all new development provides adequate space for recycling receptacles and bins on site.
- Policy LU 7.5.2:** Promote the use of recycled building materials.
- Policy LU 9.1.6:** Coordinate with appropriate agencies and organizations to ensure that landfill expansion needs are met while minimizing adverse impacts to Valley residents.

- Policy LU 9.1.7:** Provide for location of additional waste transfer stations and other facilities to promote recycling and reuse of materials within Industrial designations on the Land Use Map, subject to the provisions of the County Zoning Ordinance.
- Policy CO 1.3.3:** Provide informational material to the public about programs to conserve non-renewable resources and recover materials from the waste stream.
- Policy CO 1.4.4:** In cooperation with other appropriate agencies, continue to develop and implement effective methods of handling and disposing of hazardous materials and waste.
- Policy CO 2.1.3:** Promote soil enhancement and waste reduction through composting, where appropriate.
- Policy CO 8.4.1:** Encourage and promote the location of enclosed materials recovery facilities (MRF) within the Santa Clarita Valley.
- Policy CO 8.4.2:** Adopt mandatory residential recycling programs for all residential units, including single-family and multi-family dwellings.
- Policy CO 8.4.3:** Allow and encourage composting of greenwaste, where appropriate.
- Policy CO 8.4.4:** Promote commercial and industrial recycling, including recycling of construction and demolition debris.
- Policy CO 8.4.5:** Develop and implement standards for refuse and recycling receptacles and enclosures to accommodate recycling in all development.
- Policy CO 8.4.6:** Introduce and assist with the placement of receptacles for recyclable products in public places, including at special events.
- Policy CO 8.4.7:** Provide information to the public on recycling opportunities and facilities, and support various locations and events to promote public participation in recycling.

### *Effectiveness of Proposed Area Plan Policies*

The proposed Area Plan policies would help reduce impacts on solid waste within the County's Planning Area. However, they would not reduce the impacts to less than significant. Mitigation measures **MM 3.17-1** through **MM 3.17-5** would be required to potentially reduce impacts to less than significant.

### **Plan to Plan Analysis**

Since the buildout population under the existing Plan would be greater than the buildout population under the proposed Area Plan, the solid waste generation and disposal needs at buildout under the existing Area Plan would potentially be greater. Solid waste generation for the County's Planning Area is analyzed using the adjacent City's Planning Area solid waste generation numbers (**Section 3.17, Utilities and Infrastructure**). The amount of waste disposed (2007) by the City's Planning Area was 163,000 tons; the County's Planning Area waste disposed was 48,512 tons.

The County's Planning Area buildout population under the existing Plan would be 270,000 residents. Using the same per capita waste generation in the impact analysis, the projected amount of waste disposal at buildout under the existing Area Plan would be 174,434 tons per year or 477.9 tons per day. Waste generated under the proposed Area Plan would be in the amount of 200,909.2 tons per year or 550.4 tons per day. Given the projected amount of landfill capacity needed for the County's Planning Area at buildout of either the existing Area Plan or proposed Area Plan and the fact that nearby landfills are approaching full capacity for waste disposal, there would be a shortfall of capacity by 2014. Therefore, this impact is significant and unavoidable. Since the existing Area Plan would potentially increase the population of the County's Planning Area at buildout more than with the proposed Area Plan, impacts on solid waste would be greater under the existing Area Plan.

### **Impact 3.17-5                      Buildout of the Area Plan would comply with federal, state, and local statutes and regulations related to solid waste.**

State law, through the California Integrated Waste Management Act (AB 939), requires that 50 percent of municipal solid waste be diverted from landfills via reuse or recycling. The County's Planning Area currently uses the Chiquita Canyon Sanitary Landfill, Lancaster Landfill and Recycling Center, and the Simi Valley Landfill and Recycling Center to divert recyclable materials from the waste stream. As previously described, the County's Planning Area analysis was extrapolated to produce the same as or less than the amount of waste because the County's Planning Area is adjacent to and surrounds the City's

Planning Area. The 2007 total Alternative Daily Cover<sup>24</sup> for the City's Planning Area was 24,168 tons which was sent to a composting facility.<sup>25</sup> The 2007 total alternative daily cover for the City's Planning Area was 2,245.57 tons. The 2006 diversion rate for all of Los Angeles County unincorporated areas was 54 percent and the 2006 City's Planning Area diversion rate was 54 percent, so it is reasonable that the diversion rate for the OVOV Planning Area was 54 percent, which meets the state's 50 percent diversion requirement.

### **Proposed Area Plan Policies**

All of the applicable proposed Area Plan policies are listed above.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed Area Plan policies would comply with federal, state, and local statutes and regulations related to solid waste within the County's Planning Area. Impacts would be less than significant.

### **Plan to Plan Analysis**

Both the existing Plan and the proposed Plan would be required to comply with all laws and standards pertaining to solid waste. Consequently, impacts would be similar in both Plans.

### **Mitigation Framework**

Implementation of the following mitigation measures would reduce impacts on solid waste to a less than significant level.

**MM 3.17-1** The County of Los Angeles shall follow state regulations in implementing the goals, policies, and programs identified in the Los Angeles County Integrated Waste Management Plan in order to achieve and maintain a minimum of 50 percent reduction in solid waste disposal through source reduction, reuse, recycling, and composting.

**MM 3.17-2** The County shall require all future commercial, industrial and multifamily residential development to provide adequate areas for the collection and loading of recyclable materials (i.e., paper products, glass, and other recyclables) in compliance with the State

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<sup>24</sup> Board-approved materials other than soil used as a temporary overlay on an exposed landfill face.

<sup>25</sup> California Integrated Waste Management Board, Disposal Reporting System, "Jurisdictional Disposal by Facility," <http://www.ciwmb.ca.gov/LGCentral/Reports/DRS/Destination/JurDspFa.aspx>. 2008.

Model Ordinance, implemented on September 1, 1994, in accordance with AB 1327, Chapter 18, California Solid Waste Reuse and Recycling Access Act of 1991.

- MM 3.17-3** The County shall require all development projects to coordinate with appropriate County agencies to ensure that there is adequate waste disposal capacity to meet the waste disposal requirements of the County's Planning Area, and the County shall recommend that all development projects incorporate measures to promote waste reduction, reuse, recycling, and composting.
- MM 3.17-4** All new development in the County's Planning Area will be required to implement existing and future waste reduction programs in conformance with the County's Planning Area SRRE program.
- MM 3.17-5** Any hazardous waste that is generated on site, or is found on site during demolition, rehabilitation, or new construction activities shall be remediated, stored, handled, and transported in compliance per appropriate local, state, and federal laws, as well as with the County's SRRE.

### **Significance of Impact with Mitigation Framework**

Impacts on solid waste would remain significant and unavoidable with the implementation of the proposed Area Plan policies and incorporation of mitigation measures **MM 3.17-1** through **3.17-5**.

## **ELECTRICITY, NATURAL GAS, AND TELECOMMUNICATIONS**

### **Summary**

This section evaluates the potential environmental impacts of the County's projected buildout on electricity, natural gas, and telecommunications service to the County's Planning Area. The location of these facilities and their respective transmission corridors are described along with their anticipated ability to meet the needs of the County's Planning Area.

## Existing Conditions

### *Electricity*

#### **Provider/Service Area**

Southern California Edison (SCE) is the primary provider of electric service to the OVOV Planning Area. The service area for SCE is 50,000 square miles and includes 180 cities and communities and 13 million people in central, coastal, and southern California.<sup>26</sup> SCE-owned generation facilities provide approximately one third of the power to the service area, while another one third is supplied by alternate energy producers with whom SCE has contracted for power. The last one third of power is imported through Independent System Operator (ISO). Although the number of generating facilities owned by SCE has been reduced recently due to restructuring of the electric industry, it does own and operate three facilities—San Onofre Nuclear Generating Station (SONGS), Big Creek Hydroelectric system, and the Mojave Coal Generation Station—all of which are located outside of the OVOV Planning Area.

California has the lowest electricity per capita usage in the nation.<sup>27</sup> While the United States' per capita usage has increased by nearly 50 percent over the last 30 years, California's per capita usage has remained almost flat, due to vigorous energy efficiency mandates discussed below. Accordingly, increases in California's overall demand for electricity resources are not attributable to increasing per capita demands, but population growth.<sup>28</sup>

Approximately 78 percent of California's electricity is produced in state, with the remaining 22 percent coming from the Pacific Northwest and Southwest. The state's electricity generation system provides over 290,000 gigawatt hours per year, which are transported over 32,000 miles of transmission lines.<sup>29</sup>

Power is initially delivered from the California grid to transformers in the OVOV Planning Area, where the voltage is then reduced and later transmitted to seven sub-stations throughout the area. The voltage is once again stepped down at the sub-stations and finally distributed to users. The Saugus Substation acts as the major distributor of electricity in the OVOV Planning Area. According to the California Energy Commission (CEC), SCE is projected to deliver approximately 104.8 million megawatt-hours (MWh) to its

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<sup>26</sup> Southern California Edison. "Company Overview," <http://www.sce.com/AboutSCE/CompanyOverview/>. 2008.

<sup>27</sup> *City of Santa Clarita, Landmark Village Recirculated EIR*, November 2008.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

customers during 2009.<sup>30</sup> By 2016, SCE's demand is expected to increase to approximately 113.4 million MWh.<sup>31</sup> The OVOV Planning Area has proportionally more residential consumption and less industrial consumption relative to SCE's system average; the average County resident uses more electricity than the typical SCE customer. This is likely due to the OVOV Planning Area's warmer climate coupled with its relative lack of older, generally much smaller homes, and relatively few multi-family units. Because the proposed Area Plan is programmatic and does not provide information on proposed types of development projects, it is difficult to estimate the peak megawatt demand for County's Planning Area.

### **Transmission of Electricity**

Currently major electrical power lines extend in an east/west direction through the OVOV Planning Area, and in a north/south direction through the western portion of the OVOV Planning Area. Communication lines and facilities are located in the eastern portion of the OVOV Planning Area, southeast of Agua Dulce. Utility facilities are located mostly in the northwestern portion of the City of Santa Clarita, while natural gas and petroleum facilities are scattered throughout most of the OVOV Planning Area. Transmission lines serving the electrical infrastructure would be extended in accordance with SCE's projected development demands.<sup>32</sup>

### **Supply—The “Energy Crisis”**

Southern California consumers have recently experienced rising energy costs and uncertainties regarding the supply of electricity. The causes of these conditions are under investigation and are the subject of much debate. Some of the factors involved that may have led to the energy shortages experienced in late 2000 and early 2001 in California include a lack of new major power plants, drought conditions, lack of emphasis on energy conservation, and deregulation. In addition, surrounding states that used to provide up to 20 percent of California's energy have also experienced significant growth, thereby limiting their electricity exports to California.

The drought conditions experienced in the Pacific Northwest in 2000 and 2001 also resulted in the reduction of the volume of water available for hydroelectric power generation, which otherwise could have been exported to California as it has in previous years. Furthermore, the increase in energy supplies

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<sup>30</sup> California Energy Commission. California Energy Demand 2006-2016 Staff Energy Demand Forecast Revised September 2005. Staff Final Report. Publication #CEC-400-2005-034-SF-ED2. September 2005.

<sup>31</sup> California Energy Commission. California Energy Demand 2006-2016 Staff Energy Demand Forecast Revised September 2005. Staff Final Report. Publication #CEC-400-2005-034-SF-ED2. September 2005.

<sup>32</sup> CPUC. “Rules July 2007,” [http://docs.cpuc.ca.gov/published/RULES\\_PRAC\\_PROC/70731.htm#P323\\_46666](http://docs.cpuc.ca.gov/published/RULES_PRAC_PROC/70731.htm#P323_46666). Rule 3.1. 2008.



during the 1980s caused the cost of electricity to decrease, which resulted in less emphasis being placed on energy conservation and efficiency programs. Lastly, another factor leading to the recent California “energy crisis” may be the lack of cost controls as a result of deregulation. The law for deregulation went into effect in 1998 with the goal of enhancing competition and consumer choice in electricity generators. Prior to enactment of the law, local utilities provided bundled service including generation, transmission, and distribution. After the law, the investor owned utilities, such as SCE, became local Utility Distribution Companies (UDCs). Although these utilities could continue to provide distribution services, they no longer controlled transmission. Under the law, the transmission and distribution of electricity would remain a regulated monopoly, but the generation of electricity would be opened up to competition. Utilities were encouraged to sell their power plants and were required to purchase all their electricity needs from the wholesale market. However, an electricity supply/demand mismatch occurred as existing utilities sold their power plants but were not responsible for building new ones. The fact that new power plants would take at least a few years to be permitted and constructed, coupled with the economic and population growth in California, resulted in an energy shortage.

The CEC is currently considering applications for the development of new power-generating facilities in Southern California and elsewhere in the state. These facilities could supply additional energy to the power supply grid within the next few years. Additionally, efforts are being taken to modify existing plants and repowering existing sites to improve generation capacity. A broad-ranging effort is also undertaken by the state to reduce peak electricity demand in California, including actions to encourage voluntary load reduction by customers and to promote incentive programs for demand reducing technologies, energy efficient construction techniques, and the installation of energy efficient equipment.

### ***Energy Conservation Programs***

The potential for rolling electrical outages will continue as long as statewide energy shortages exist. Because energy conservation can significantly help avert outages by reducing the demand for energy, the County promotes energy conservation.

The two most prevalent energy conservation programs for the County include the LACDWP “Green LA” program and the public education and outreach facilitated by the County Web site: [www.888CleanLA.com](http://www.888CleanLA.com). Other energy conservation programs include Title 24 (California’s Energy Efficiency Standards for Residential and Nonresidential Buildings) measure enforced by the County’s Building and Safety Division and energy conservation programs promoted by SCE and state agencies.

LACDWP launched an initiative to integrate more renewable energy into the County's power supply and to reduce dependence on coal at the same time. While renewable energy made up only 3 percent of the County's power supply in 2005, as of July 1, 2008, it was at 8.5 percent and is on track to have 20 percent by 2010. The goal for 2020 is 35 percent. New development is encouraged to be designed to reduce energy and natural resource consumption by using techniques such as passive solar energy techniques and energy efficient appliances.

## Natural Gas

### *Provider/Service Area*

Natural gas service to the County's Planning Area is provided by the Southern California Gas Company (SCG). SCG operates numerous natural gas pipelines in the County's Planning Area. Gas service lines in the OVOV Planning Area range in size from 2- to 34-inch mains. In the eastern part of the OVOV Planning Area, a 30-inch gas line runs along the Santa Clara River. In the western portion of the Valley a 34-inch and a 22-inch main cross the river. Most of the transmission and distribution lines currently serving the OVOV Planning Area operate at a medium pressure of approximately 30 to 60 psi, except for those located in industrial areas where large natural gas users are prevalent and require higher-pressure lines.

### *Supply*

Approximately 13.5 percent of California's natural gas is produced in state; the remaining portion of the natural gas supply comes from the Southwest (40 percent), the Rocky Mountains (23 percent), and Canada (23.5 percent).<sup>33</sup> According to the 2008 California Gas Report, natural gas demand in California is "expected to grow at a modest rate of just 0.1 percent per year from 2008 to 2030."<sup>34</sup> Residential demand, in particular, is expected to increase at an annual average rate of 0.3 percent, which is half the rate that was projected in the 2006 California Gas Report.<sup>35</sup> Commercial demand is expected to remain unchanged, whereas industrial demand is estimated to decline by 1.0 percent on an annual basis. As provided in the 2008 California Gas Report, the state is projected to have adequate natural gas resources to meet the statewide demand during the 2008 to 2030 time frame.

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<sup>33</sup> *Summary of the 2007 Integrated Energy Policy Report*, California Energy Commission, 11.

<sup>34</sup> *City of Santa Clarita, Landmark Village Recirculated EIR*, November 2008.

<sup>35</sup> *Ibid.*

With regards to the SCG service area (50,000-square-mile area of central, coastal and Southern California, excluding the City of Los Angeles), gas demand for all market sectors is expected to grow at an annual average rate of just 0.02 percent from 2008 to 2030.<sup>36</sup> In comparison, the 2006 California Gas Report projected an annual growth rate of 0.15 percent from 2006 to 2025. According to the 2008 California Gas Report, the “difference between the two forecasts is caused by the slump in the housing market for the next few years, a reduced employment forecast, and aggressive energy efficiency savings goals.”

SCG is the sole supplier of natural gas to the County’s Planning Area, and will continue to expand its distribution facilities and gas lines as development occurs in the area. According to the CEC, SCG is expected to provide approximately 790.3 billion cubic feet (bcf) of natural gas to its customers in 2009.<sup>37</sup> By 2016, annual natural gas deliveries to SCG customers are expected to increase to approximately 792.4 bcf per year.<sup>38</sup> Due to the particular boundaries of the OVOV Planning Area, however, SCG was unable to quantify the number of active meters or determine the annual amount of natural gas consumption for the area. Some locations in the OVOV Planning Area are not served by natural gas.

## Telecommunications

### *Telephone Service*

Telephone service to the County’s Planning Area is provided by AT&T and Verizon Communications. As development continues in the County’s Planning Area, the telephone companies would provide additional system capacity and service connections. There are cellular towers located throughout the OVOV Planning Area.

### *Television Service*

Cable television service in the County’s Planning Area is provided by Time Warner Cable and AT&T. Satellite television service in the County’s Planning Area is provided by DirecTV and Dish Network. Geographically, Canyon Country and parts of Saugus are served by Time Warner Cable. As an addition to its cable television franchise with Time Warner in July of 2006, the Santa Clarita City Council executed a Public Benefits Agreement with AT&T that allows AT&T to make competitive television service available to City residents. AT&T began offering television services to Santa Clarita in 2007 and is expected to serve up to roughly 30,000 homes in the OVOV Planning Area.

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<sup>36</sup> *City of Santa Clarita, Landmark Village Recirculated EIR*, November 2008.

<sup>37</sup> California Energy Commission. California Energy Demand 2006-2016 Staff Energy Demand Forecast Revised September 2005. Staff Final Report. Publication #CEC-400-2005-034-SF-ED2. September 2005.

<sup>38</sup> Ibid.

Federal laws provide oversight of the cable industry. While the County continues to serve as the local franchise authority and will respond to every community inquiry that it receives, it is important for residents to understand the extent of the County's authority. Under current federal law, the County does not have any legal ability to dictate what Time Warner charges for their services or how Time Warner sets its channel line up. In fact, as currently written, federal law allows all cable providers to operate in a deregulated manner when it comes to issues concerning pricing or channel line up.<sup>39</sup>

### *Internet Service*

In 1998, the Connecting Communities Steering Committee was formed to assess the Santa Clarita Valley's ability to assimilate into the new infrastructure associated with the Internet. The vision of the Committee is to ensure the rapid deployment of advanced communications technologies to the OVOV Planning Area, and to use this advanced communications and information technologies to promote economic development. As a result, Time Warner Cable has begun upgrading its wiring plans to provide new, high-speed Internet service to businesses and neighborhoods in the OVOV Planning Area. Portions of the OVOV Planning Area that are not well served will be connected to higher speed digital wireless services in the near future. AT&T offers Digital Subscriber Line (DSL) service, while AT&T and Time Warner cable companies offer cable modem service.<sup>40</sup>

### *Development Constraints from Utility Corridors*

Serving as the gateway to the San Joaquin Valley and Antelope Valley and to all areas to the north and east of the greater Los Angeles area, the OVOV Planning Area is a critical utility corridor for water, electricity, natural gas, and petroleum products. However, these major utility corridors have served to constrain development in the OVOV Planning Area, as a host of private properties have either utility easements, utility right-of-way restrictions, or are located in proximity to a major utility corridor. In addition to the utility corridors, various utility companies also own properties within the County's Planning Area that often remain vacant, thus reducing the total amount of developable property in the County's Planning Area.

The aboveground and underground utility lines that criss-cross the County's Planning Area include the following:

- First Los Angeles Aqueduct (LADWP);

<sup>39</sup> City of Santa Clarita, "Local Television Service Providers," <http://www.santa-clarita.com/cityhall/admin/cable/> (accessed October 1, 2007).

<sup>40</sup> City of Santa Clarita, <http://www.santa-clarita.com/cityhall/admin/cable/>. 2008.

- Second Los Angeles Aqueduct (LADWP);
- Los Angeles Department of Water and Power electrical transmission lines, including a major corridor from the Sylmar Converter Station to the Castaic Power Plant, a corridor from the Pacific Northwest to Owens Valley and the Castaic Power Plant, and a corridor extending near the Antelope Valley Freeway (State Route 14, or SR-14) corridor through the Antelope Valley;
- Metropolitan Water District pipeline extending from Castaic Lake to the Granada Hills water treatment facility;
- Southern California Edison electrical transmission system, which includes multiple lines to the north and east;
- Southern California Gas Company natural gas pipeline extending north-south;
- Multiple petroleum pipelines; and
- Fiber optic lines.

## **Regulatory Setting**

### ***State Regulations***

#### **California State Board of Education/State Department of Health Services**

The California State Board of Education, in consultation with the State Department of Health Services (DHS) and electric power companies, has established the following limits for locating any part of a new school site property line near the edge of easements for high-voltage power transmission lines:<sup>41</sup>

- 100 feet from the edge of an easement for a 50–133 (kilovolts) kV line;
- 150 feet from the edge of an easement for a 220–230 kV line; and
- 350 feet from the edge of an easement for a 500–550 kV line.

#### **California Public Utilities Commission**

California Public Utilities Commission (CPUC) General Order 112E, which is based upon the Federal Department of Transportation Guidelines contained in Part 192 of the Federal Code of Regulations, specifies a variety of design, construction, inspection and notification requirements. The CPUC conducts annual audits of pipeline operations to ensure compliance with these safety standards. In addition, the SCG has a safety program which has reduced the risk of gas distribution fires by improving welds on the

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<sup>41</sup> California Department of Education, Power Line Setback Exemption Guidance – May 2006

larger diameter (24- to 30-inch) pipelines and by replacing old distribution pipes with flexible plastic pipes. According to SCG staff, high-pressure gas mains are common in developed areas throughout the country, and SCG lines are inspected regularly and must comply with CPUC mandated safety requirements.

### **California Energy Commission**

The CEC was created as the state's principal energy planning organization in 1974, in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- forecasting statewide electricity needs;
- licensing power plants to meet those needs;
- promoting energy conservation and efficiency measures;
- developing renewable energy resources and alternative energy technologies;
- promoting research, development and demonstration; and
- planning for and directing state response to energy emergencies.<sup>42</sup>

### **Title 24, part 6, of the California Code of Regulations**

Title 24, part 6, of the California Code of Regulations contains the CEC's Energy Efficiency Standards for Residential and Nonresidential Buildings. Title 24 was first established in 1978, in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The latest version is the "the 2005 Standards" which went into effect on October 1, 2005; the 2005 Standards are applicable to this proposed General Plan. However, on August 1, 2009, the "2008 Standards" will come into effect. The CEC adopted the 2005 Standards for a number of reasons:

- to respond to California's energy crisis, reduce energy bills, increase energy delivery system reliability, and contribute to an improved economic condition for the state;
- to respond to AB 970 (Statutes of 2000) urgency legislation to adopt and implement updated and cost-effective building energy efficiency standards;

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<sup>42</sup> Summary of the 2007 Integrated Energy Policy Report, California Energy Commission, 2.

- to respond to the SB 5X (Statutes of 2001) urgency legislation to adopt energy efficiency building standards for outdoor lighting;
- to emphasize energy efficiency measures that save energy at peak periods and seasons;
- improve the quality of installation of energy efficiency measures;
- incorporate recent publicly funded building science research; and
- collaborate with California utilities to incorporate results of appropriate market incentive programs for specific technologies.

### **Assembly Bill 32**

In addition to Title 24, the Global Warming Solutions Act of 2006 (AB 32) is anticipated to result in the future regulation of energy resources in California. AB 32 requires California to reduce its carbon footprint (i.e., its greenhouse gas emissions) to 1990 levels by 2020. (See **Section 3.4, Global Climate Change**, for additional information on AB 32.) In order to achieve these emission reductions, it is generally accepted that California will need to improve its overall energy efficiency, which includes the use of more renewable energy resources. Pursuant to AB 32, the California Air Resources Board will work with other state agencies (including the CEC), to implement feasible programs and regulations that reduce emissions and improve energy efficiency.<sup>43</sup>

### **Assembly Bill 1890**

The CPUC regulates investor-owned electric power and natural gas utility companies in the State of California. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities (e.g., Southern California Edison) was decoupled. All new construction in the State of California is subject to the energy conservation standards set forth in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The utilization of alternative energy applications in development projects (including the proposed project), while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy

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<sup>43</sup> See <http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm#electric>, last visited on January 6, 2009 [highlights targeted improvements for the energy sector].

sources (i.e., electricity and natural gas). Incentives, primarily in the form of state and federal tax credits, as well as reduced energy bills, provide a favorable basis.

### ***Local Regulations***

#### **Los Angeles County Code**

Sections 102 through 114 of Chapter 1 of the 2007 California Building Code, as published by the California Building Standards Commission and are adopted by reference and incorporated into Title 26 of the Los Angeles County Code and shall be known as Sections 120 through 132, respectively of Chapter 1 of Title 26 of the Los Angeles County Code.

The Los Angeles County Building Code became effective for new building permit applications received by the County on or after January 1, 2008.

### **Thresholds of Significance**

Appendix G of the *State CEQA Guidelines* does not include thresholds for determining the significance of impacts related to electricity. For purposes of this analysis, impacts related to electricity, natural gas, and telecommunications are considered significant if the project would:

- have a significant impact on natural gas or electrical service if existing or planned facilities and supplies are not adequate to serve the proposed land uses or if existing natural gas or electrical service is significantly disrupted, or
- buildout of the County's Planning Area will have the potential to have a significant impact on the access for locations and any potential adverse environmental impacts on telecommunications.

### **Impact Analysis**

This impact analysis section evaluates the potential effects of the proposed Area Plan on natural gas, electricity, and telecommunications within the County's Planning Area using the *State CEQA Guidelines* thresholds of significance.



**Impact 3.17-6**            **A potentially significant impact to electrical service occurs when demand exceeds the capacity of existing and planned sources and distribution facilities.**

Presently and for the foreseeable future, the national and regional supply of electrical energy is not in jeopardy. The acceleration of the approval and licensing process of additional state power plants will ensure an adequate supply of electricity for state consumers.

Past shortages of electricity were solved by the additional power plants being brought “on-line” in California. The matter of electrical generation capacity is not one of physical shortages due to power plant limitations; rather, it is a function of market forces and the wholesale cost of electricity. This cost and supply adjustment was evident when energy producers withheld electricity from the market and were unwilling to sell electricity at market prices. This enabled energy suppliers to create a false electricity shortage that artificially inflated prices to a desired point. Suppliers sold electricity at this inflated price. As a result of mandated price caps, California’s investor-owned utilities were required to purchase electricity for their customers on the open market at inflated prices well above their costs.

According to the CEC, SCE is projected to deliver approximately 104.8 Megawatt Hours (MWh) to its customers during 2009; the demand is expected to increase to approximately 113.4 MWh in 2016. Implementation of the proposed Area Plan would result in increased demand in electricity service to the County’s Planning Area. New development occurring from buildout would be subject to Title 24, part 6 of the California Administrative code, the Energy Efficiency Standards for Residential and Nonresidential Buildings, which requires local jurisdiction to use energy efficient appliances, weatherization techniques and efficient cooling and heating systems to reduce energy demand stemming from new development (**Policy CO 1.5.7** and **Policy LU 4.5.3**). The latest update to Title 25, part 6 will be adopted in August of 2009 (**Policy CO 8.1.2**).

### ***Proposed Area Plan Policies***

**Policy CO 1.5.7:**        Consider the principles of environmental sustainability, trip reduction, walkability, stormwater management, and energy conservation at the site, neighborhood, district, city, and regional level, in land use decisions.

**Policy LU 4.5.3:**        Promote the inclusion of state-of-the-art technology within business complexes for telecommunications, heating and cooling, water and energy conservation, and other similar design features.

**Policy CO 8.1.3:** Implement the ordinances developed through the County's Green Building Program.

### *Effectiveness of Proposed Area Plan Policies*

The proposed Area Plan policies minimize the effects of the additional demand and consumption of electricity associated with buildout of the County's Planning Area. Implementation of the policies would reduce the effects of growth and development on energy resources. However, the proposed Area Plan policies do not provide concrete means of implementation and enforcement. Many policies lack performance standards that ensure appropriate actions and parameters would be achieved. Impacts on energy resources due to the additional demand for and consumption of electricity with the prospective growth within the County's Planning Area can be further minimized through implementation of mitigation measures **MM 3.17-6** and **MM 3.17-7**.

### **Plan to Plan Analysis**

The County's electricity needs at buildout would be less under the proposed Area Plan because the buildout population of the proposed Area Plan would be less than the buildout population of the existing Area Plan. Consequently, impacts on electricity would potentially be greater from the County's existing Area Plan when compared to the proposed Area Plan.

**Impact 3.17-7**      **A potentially significant impact to natural gas service occurs when demand exceeds the capacity of existing and planned sources and distribution facilities.**

The 2009 projected supply of natural gas from SCG was expected to be approximately 790.3 billion cubic feet (bcf). By 2016, the annual natural gas deliveries to SCG customers are expected to increase to approximately 792.4 bcf per year. The additional growth anticipated with the proposed Area Plan will require that natural gas purveyors expand existing facilities or increase supply (**Policy LU 4.4.4**). SCG has stated that as future demand for natural gas increases as a result of new development, SCG will expand its existing facilities. The construction of new natural gas facilities or expansion of existing facilities may cause environmental effects. It is not possible to accurately determine or quantify such environmental effects without site locations and specific project details. Future natural gas needs will be evaluated as each new development is proposed. Recommendations for improvements to existing and/or construction of new natural gas facilities will also be made at that time. Greater energy efficiency in building and site design would be met through **Policies LU 7.1.1** through **LU 7.1.4**, which require use of shade trees, promote the use of solar panels, encourage development of energy-efficient buildings, and support the

establishment of energy-efficient industries. Through the County's environmental review process, future development projects will be evaluated for potential impacts pertaining to the provision of natural gas.

### ***Proposed Area Plan Policies***

- Policy LU 4.4.4:** Protect and enhance public utility facilities as necessary to maintain the safety, reliability, integrity, and security of essential public service systems for all Valley residents.
- Policy LU 7.1.1:** Require shade trees within parking lots and adjacent to buildings to reduce the heat island effect, in consideration of Fire Department fuel modification restrictions.
- Policy LU 7.1.2:** Promote the use of solar panels and renewable energy sources in all projects.
- Policy LU 7.1.3:** Encourage development of energy-efficient buildings, and discourage construction of new buildings for which energy efficiency cannot be demonstrated.
- Policy LU 7.1.4:** Support the establishment of energy-efficient industries in the Santa Clarita Valley.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed Area Plan policies minimize the effects of additional demand and consumption of natural gas associated with buildout of the County's Planning Area. Implementation of the policies would reduce the effects of growth and development on energy resources. However, the proposed Area Plan policies do not provide concrete means of implementation and enforcement. Many policies lack performance standards that ensure appropriate actions and parameters would be achieved. Impacts on energy resources due to the additional demand for and consumption of natural gas associated with the prospective growth within the County's Planning Area can be further minimized through implementation of mitigation measures **MM 3.17-6** and **MM 3.17-7**.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans do not incorporate performance standards for the development of energy resources or a means of enforcement. Mitigation measures have been proposed

which will provide performance standards for natural gas consumption. Consequently, impacts are greater under the existing Area Plan, as it lacks these mitigation measures.

**Impact 3.17-8**                    **A potentially significant impact to telecommunications occurs when demand exceeds the capacity of existing and planned sources and distribution facilities.**

The existing telecommunications services provided in the County's Planning Area includes telephone service, television service, and internet services. As described in (Telecommunications) there are various service providers for each telecommunication area, providing the customers with opportunities to select the appropriate service for what they are looking for. In order for the County to meet the demand of the residents at buildout, new utility corridors, or at least upgrades to these corridors, would need to be addressed. New facilities would be subject to CEQA and would use the best available technology to provide the needed services and to be able to meet state guidelines (**Policy LU 4.4.1** and **Policy LU 4.5.3**).

### ***Proposed Area Plan Policies***

**Policy LU 4.4.1:**                    Promote extension of state of the art communication facilities to serve commercial and industrial areas, including fiber optic cable, telecommunication facilities, and other technology as deemed appropriate.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed Area Plan policies would minimize the potential effects of the additional demand for telecommunications from buildout of the County's Planning Area. New facilities would be subject to CEQA and would use the best available technology to provide the needed services and to be able to meet state guidelines. No mitigation measures are required.

### **Plan to Plan Analysis**

The County's telecommunication needs at buildout would be less under the proposed Area Plan because the buildout population of the proposed Area Plan would be less than the buildout population of the existing Area Plan. Consequently, impacts on electricity would potentially be greater from the County's existing Area Plan when compared to the proposed Plan.

## Mitigation Framework

Implementation of the following mitigation measures would reduce impacts on electricity, natural gas, and telecommunications to a less than significant level.

**MM 3.17-6** The County shall review all development proposals to guarantee that sufficient energy resources and facilities are available to supply adequate energy to the proposed project and associated uses prior to approval.

**MM 3.17-7** The County shall review all development plans to guarantee that energy conservation and efficiency standards of Title 24 are met and are incorporated into the design of the proposed project prior to approval.

## Significance of Impact after Mitigation Measures

The implementation of the preceding proposed Area Plan policies and mitigation measures **MM 3.17-6** and **MM 3.17-7** will result in less than significant impacts on energy resources and telecommunications.

### EXECUTIVE SUMMARY

The County of Los Angeles retained a noise consultant, Mestre Greve Associates, to conduct a noise study for the County's proposed Area Plan and the City's proposed General Plan. This study evaluated existing noise conditions throughout the One Valley One Vision (OVOV) Planning Area, and projected future noise levels based upon growth and traffic projections developed through the OVOV planning process. Data used in the preparation of this section were based upon various state and federal sources, field measurements, and modeling of traffic data in the OVOV Planning Area. This section describes the environmental noise conditions within the OVOV Planning Area while focusing on the County's Planning Area. The County's Planning Area consists of unincorporated land outside the City's boundaries and the adopted Sphere of Influence (SOI) but within the OVOV Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Together the County and the City Planning Areas comprise the OVOV Planning Area.

Motor vehicles currently comprise the predominant noise source in the OVOV Planning Area; aircraft, industrial, and commercial activities are not significant noise sources. As development occurs within the OVOV Planning Area, significant construction noise would occasionally occur. There is also potential for significant vibration impacts during pile driving.

At buildout of the proposed Area Plan, 12 roadway segments within the County's Planning Area would experience a cumulative noise increase of 5 decibels (dB) or greater, which would be a significant mobile-source noise impact.

Future rail activity in the OVOV Planning Area would result in a moderate increase in the community noise equivalent level (CNEL) level by 2.4 dB and is not considered to be a substantial noise. The anticipated route of a high-speed rail line planned by the California High-Speed Rail Authority through the OVOV Planning Area is not known, and the type of train and corresponding noise levels have not been determined. Nonetheless, there is potential for significant noise and vibration impacts with operations of a high-speed rail system through the Valley.

California Noise Insulation Standards require that interior noise levels from exterior sources be reduced to 45 dB(A) (CNEL or  $L_{dn}$ ) or less in any habitable room of a multi-residential use facility with doors and windows closed. However, exteriors of residences in transit-oriented development and in mixed use developments within the OVOV Planning Area would not necessarily meet the acceptable 65 dB(A) CNEL levels under the State Land Use Compatibility Guidelines for Noise, and perceptible vibrations

from low frequency noise (rail and music), which are difficult to mitigate, could be a source of annoyance for residents. As a result, a significant noise and vibration impact could occur in transit-oriented development and in mixed-use developments within the OVOV Planning Area.

Policies within the proposed Area Plan would reduce construction and operational noise impacts, however not to a level of less than significant. Mitigation is recommended to reduce construction vibration impacts during pile driving by using cast-in-drilled-hole piles. Cast-in-place pile driving generally produces noise levels approximately 10 to 15 dB lower than pile driving. Construction and operational noise impacts would, nonetheless, remain significant. Therefore, short-term construction noise impacts would be unavoidably significant for the duration of the construction activities. Short-term noise and vibration impacts from the pile driving would be unavoidably significant for the duration of the pile driving. Operational noise impacts would also remain significant and unavoidable.

## FUNDAMENTALS OF ENVIRONMENTAL NOISE AND VIBRATION

### Characteristics of Sound

#### *Sound Level and Frequency*

In this impact analysis, sound is described in terms of the sound pressure (amplitude) and frequency (similar to pitch). Sound pressure is a direct measure of the magnitude of a sound without consideration for other factors that may influence its perception. The range of sound pressures that occur in the environment is so large that it is convenient to express them as sound pressure levels on a logarithmic scale. The standard unit of measurement of sound is the decibel (dB), which describes the pressure of a sound relative to a reference pressure.

The frequency (pitch) of a sound is expressed as Hertz (Hz) or cycles per second. The normal audible frequency for young adults is 20 Hz to 20,000 Hz. Community noise, including aircraft and motor vehicles, typically range between 50 Hz and 5,000 Hz. The human ear is not equally sensitive to all frequencies, with some frequencies judged to be louder for a given signal than others. As a result, various methods of frequency weighting have been developed. The most common weighting is the A-weighted noise curve (dB(A)), which approximates the sensitivity of the human ear. In the A-weighted decibel, everyday sounds normally range from 30 dB(A) (very quiet) to 100 dB(A) (very loud). Examples of various sound environments, expressed in dB(A), are presented in **Figure 3.18-1, Typical Sound Level in A-Weighted Decibels**.

### ***Propagation of Noise***

Outdoor sound levels decrease as the distance from the source increases, and as a result of wave divergence, atmospheric absorption and ground attenuation. Sound radiating from a source in a homogeneous and undisturbed manner travels in spherical waves. As the sound wave travels away from the source, the sound energy is dispersed over a greater area decreasing the sound power of the wave. Spherical spreading of the sound wave reduces the noise level at a rate of 6 dB per doubling of the distance.

Atmospheric absorption also influences the levels received by the observer. The greater the distance traveled, the greater the influence of the atmosphere and the resultant fluctuations. Atmospheric absorption becomes important at distances of greater than 1,000 feet. The degree of absorption varies depending on the frequency of the sound, as well as the humidity and temperature of the air. For example, atmospheric absorption is lowest (i.e., sound carries farther) at high humidity and high temperatures. A schematic diagram of how weather including temperature gradients and wind can affect sound propagation is shown in **Figure 3.18-2, The Effects of Weather on Sound Propagation**. Turbulence and gradients of wind, temperature and humidity also play a significant role in determining the degree of attenuation. Certain conditions, such as inversions, can channel or focus the sound waves resulting in higher noise levels than would result from simple spherical spreading. Absorption effects in the atmosphere vary with frequency. The higher frequencies are more readily absorbed than the lower frequencies. Over large distances, the lower frequencies become the dominant sound as the higher frequencies are attenuated.

### ***Duration of Sound***

Annoyance from a noise event increases with increased duration of the noise event, i.e., the longer the noise event, the more annoying it is. The “effective duration” of a sound is the time between when a sound rises above the background sound level until it drops back below the background level. Psycho-acoustic studies have determined the relationship between duration and annoyance and the amount a sound must be reduced to be judged equally annoying for increased duration. Duration is an important factor in describing sound in a community setting.

### ***Change in Noise***

Under controlled laboratory conditions, listening to a steady unwavering pure tone sound that can be changed to slightly different sound levels, a person can just barely detect a sound level change of approximately one decibel for sounds in the mid-frequency region. When ordinary noises are heard, a young healthy ear can detect changes of 2 to 3 dB. A 5 dB change is readily noticeable while a 10 dB



change is judged by most people as a doubling or a halving of the loudness of the sound. It is typical in environmental documents to consider a 3 dB change as potentially discernable.

### ***Masking Effect***

The ability of one sound to limit a listener from hearing another sound is known as the masking effect. The presence of one sound effectively raises the threshold of audibility for the second sound. For a signal to be heard, it must exceed the threshold of hearing for that particular individual and exceed the masking threshold for the background noise.

The masking characteristics of sound depend on many factors including the spectral (frequency) characteristics of the two sounds, the sound pressure levels, and the relative start time of the sounds. Masking effect is greatest when the frequencies of the two sounds are similar or when low frequency sounds mask higher frequency sounds. High frequency sounds do not easily mask low frequency sounds.

### **Factors Influencing Human Response to Sound**

Many factors influence sound perception and annoyance. These include not only physical characteristics of the sound but also secondary influences, such as sociological and external factors. Both acoustic and non-acoustic factors contribute to human response to noise. These factors are summarized in **Table 3.18-1, Factors that Affect Individual Annoyance to Noise.**

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**Table 3.18-1**  
**Factors that Affect Individual Annoyance to Noise**

Primary Acoustic Factors	<ul style="list-style-type: none"> <li>• Sound level</li> <li>• Frequency</li> <li>• Duration</li> </ul>
Secondary Acoustic Factors	<ul style="list-style-type: none"> <li>• Spectral complexity</li> <li>• Fluctuations in sound level</li> <li>• Fluctuations in frequency</li> <li>• Rise-time of the noise</li> <li>• Localization of noise source</li> </ul>
Non-Acoustic Factors	<ul style="list-style-type: none"> <li>• Physiology</li> <li>• Adaptation and past experience</li> <li>• How the listener's activity affects annoyance</li> <li>• Predictability of when a noise will occur</li> <li>• Whether the noise is necessary</li> <li>• Individual differences and personality</li> </ul>

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*Source: Mestre Greve Associates, One Valley One Vision (OVOV) Noise Element of the General Plan Technical Appendix (Laguna Niguel, California, February 16, 2009). Table 1.*

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## Sound Rating Scales

Various rating scales approximate the human subjective assessment to the “loudness” or “noisiness” of a sound. Noise metrics have been developed to account for additional parameters, such as duration and cumulative effect of multiple events. Noise metrics are categorized as single event metrics and cumulative metrics, as summarized below.

### *Single Event Metrics*

Single event metrics describe the noise from individual events, such as one aircraft flyover.

#### **Frequency Weighted Metrics (dB(A))**

In order to simplify the measurement and computation of sound loudness levels, frequency weighted networks have obtained wide acceptance. The A-weighting (dB(A)) scale has become the most prominent of these scales and is widely used in community noise analysis. Its advantages are that it has shown good correlation with community response and is easily measured. The metrics used in this study are all based upon the dB(A) scale.

#### **Maximum Noise Level**

Maximum Noise Level, or  $L_{max}$ , is the highest noise level reached during a noise event. For example, as an aircraft approaches, the sound of the aircraft begins to rise above ambient noise levels. The closer the aircraft gets the louder it is until the aircraft is at its closest point directly overhead. Then as the aircraft passes, the sound level decreases until it returns to ambient levels. Such a history of a flyover is plotted at the top of **Figure 3.18-3, Single and Cumulative Noise Metric Definitions**. It is this metric to which people generally instantaneously respond when an aircraft flyover or a loud vehicle like a truck or motorcycle passes by.

#### **Single Event Noise Exposure Level**

Single Event Noise Exposure Level (SENEL) or Sound Exposure Level (SEL) is computed from dB(A) sound levels, and is used to quantify the total noise associated with a single event, such as an aircraft overflight or a train pass-by. Within **Figure 3.18-3**, the shaded area, or the area within 10 dB of the maximum noise level, is the area from which the SENEL is computed. The SENEL value is the integration of all the acoustic energy contained within the event. Speech and sleep interference research can be assessed relative to SENEL data.

The SENEL metric takes into account the maximum noise level of the event and the duration of the event. Single event metrics are a convenient method for describing noise from individual aircraft events. This metric is useful in that airport noise models contain aircraft noise curve data based upon the SENEL metric. In addition, cumulative noise metrics such as  $L_{eq}$  (Equivalent Noise Level), CNEL (Community Noise Equivalent Level), and DNL (Day/Night Average Sound Level) can be computed from SENEL data.

### ***Cumulative Metrics***

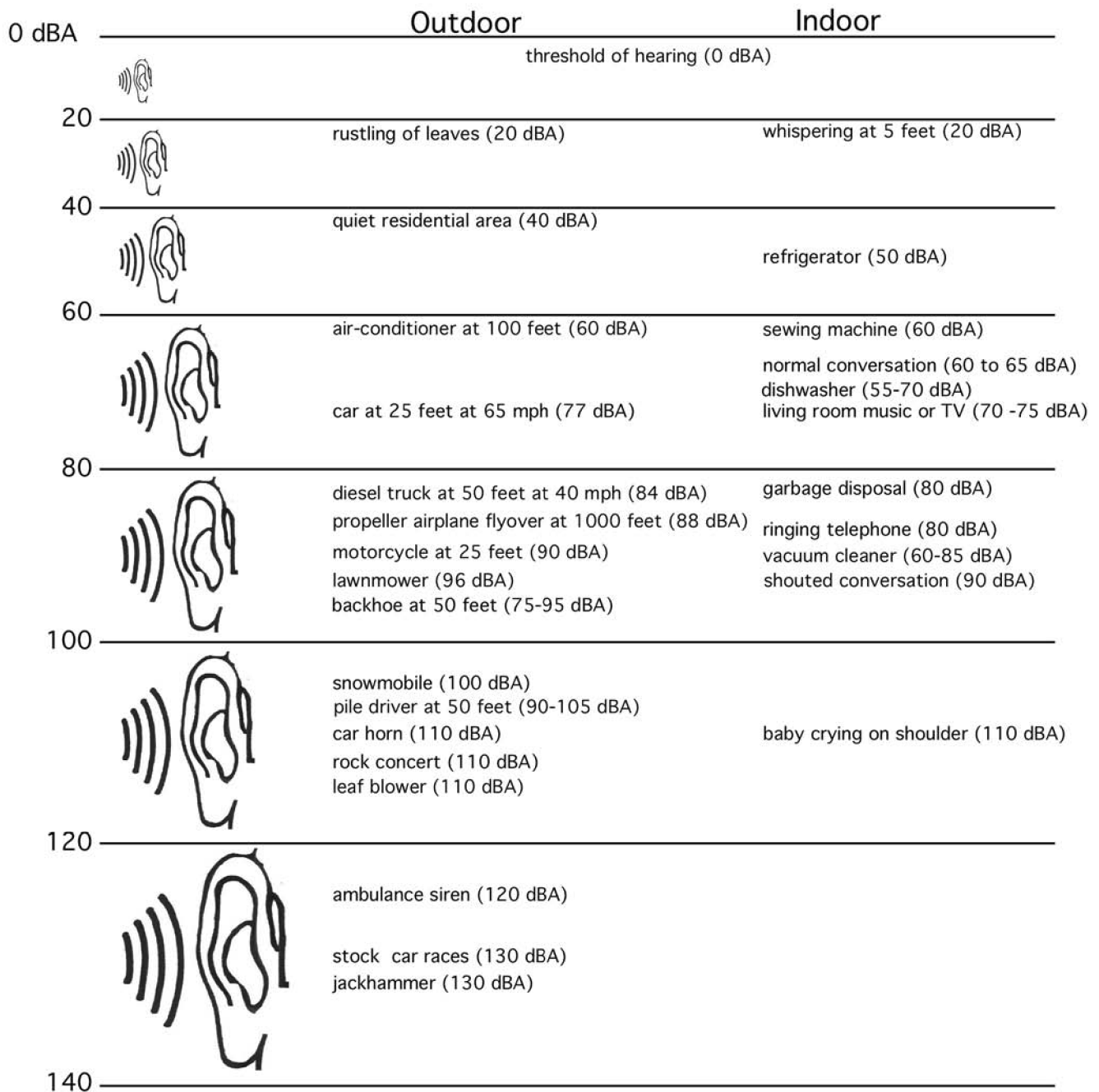
Cumulative metrics describe the noise in terms of the total noise exposure throughout the day, and incorporates the loudness of the noise, the duration of the noise, the total number of noise events and the time of day these events occur into one single number rating scale.

#### **Equivalent Noise Level**

Equivalent Noise Level ( $L_{eq}$ ) is the sound level corresponding to a steady-state A-weighted sound level containing the same total energy as several SEL events during a given sample period.  $L_{eq}$  is the “energy” average noise level during the time period of the sample. It is based on the observation that the potential for noise annoyance is dependent on the total acoustical energy content of the noise. This is graphically illustrated in the middle graph of **Figure 3.18-3**.  $L_{eq}$  can be measured for any period, but is typically measured for 15 minutes, 1 hour, or 24-hours.  $L_{eq}$  for a 1 hour period is used by the Federal Highway Administration (FHWA) for assessing highway noise impacts.  $L_{eq}$  for 1 hour is called Hourly Noise Level (HNL) in the California Airport Noise Regulations and is used to develop Community Noise Equivalent Level values for aircraft operations.

#### **Community Noise Equivalent Level**

Community Noise Equivalent Level, or CNEL, is a 24-hour, time-weighted energy average noise level based on the A-weighted decibel. It is a measure of the overall noise experienced during an entire day. The term “time-weighted” refers to the penalties attached to noise events occurring during certain sensitive time periods. In the CNEL scale, 5 dB are added to measured noise levels occurring between the hours of 7:00 PM and 10:00 PM. Ten dB are added to measured noise levels occurring between the hours of 10:00 PM to 7:00 AM. These decibel adjustments are an attempt to account for the higher sensitivity to noise in the evening and nighttime hours, and the expected lower ambient noise levels during these time periods.



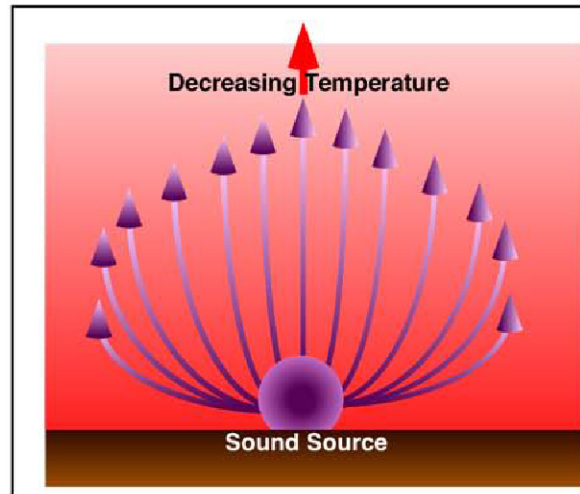
Sources: League For The Hard Of Hearing, [www.lhh.org](http://www.lhh.org)  
 Handbook of Noise Control, McGraw Hill, Edited by Cyril Harris, 1979  
 Measurements by Mestree Greve Associates

SOURCE: Mestree Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

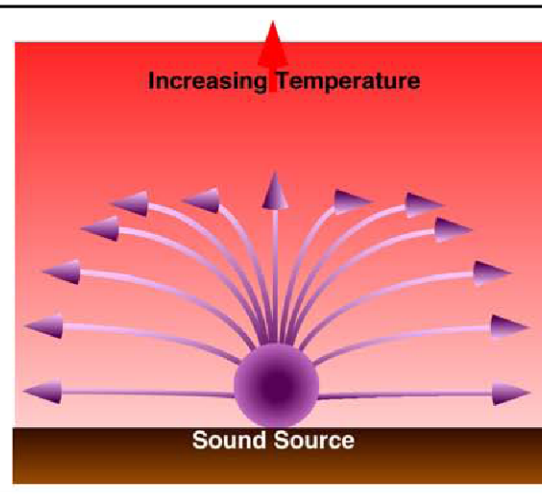
FIGURE 3.18-1

Typical Sound Level in A-Weighted Decibels

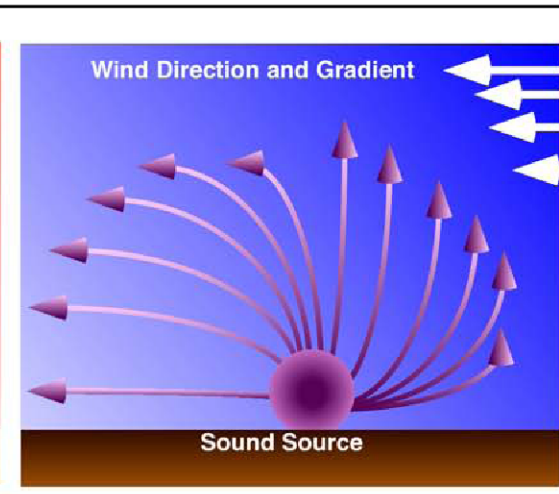
Refraction of sound in an atmosphere with a normal lapse rate. Sound rays are bent upwards.



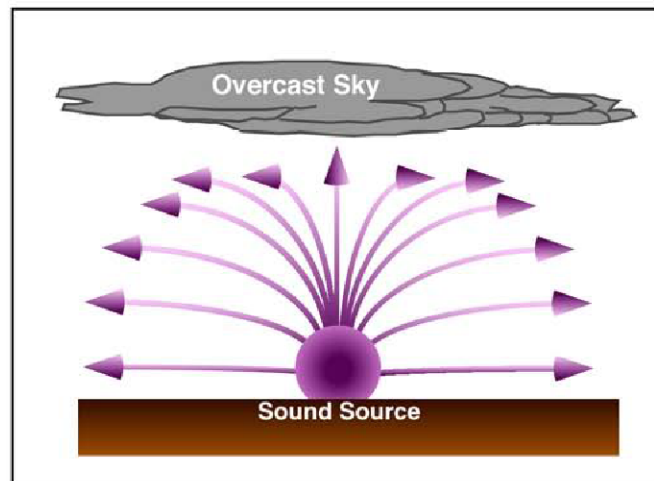
Refraction of sound in an atmosphere with an inverted lapse rate. Sound rays are bent downward.



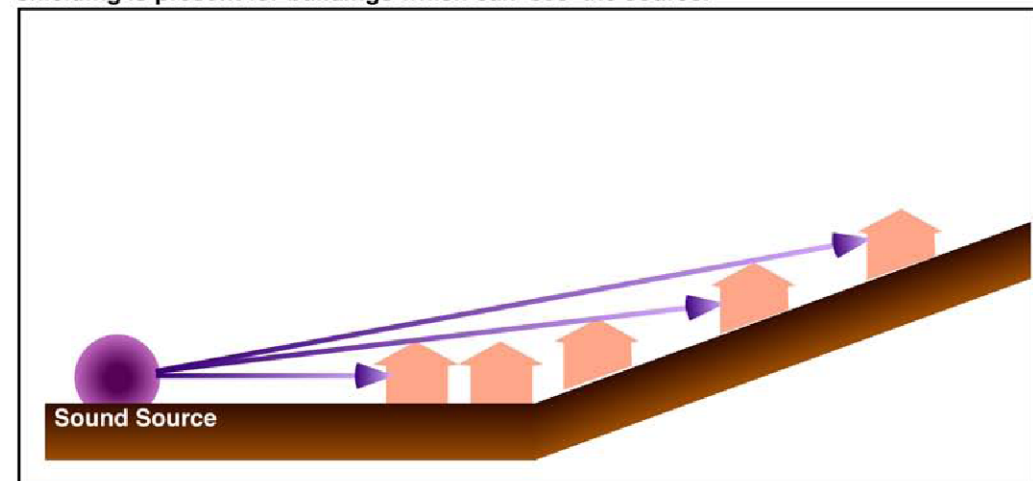
Refraction of sound in an atmosphere with a wind present. Sound rays are bent in the direction of the wind.



Refraction of sound in an atmosphere with overcast sky conditions. Sound rays are bent downward.



Propagation of sound over terrain. Ground absorption and shielding may be present for buildings at the same elevation as the source. No shielding is present for buildings which can 'see' the source.



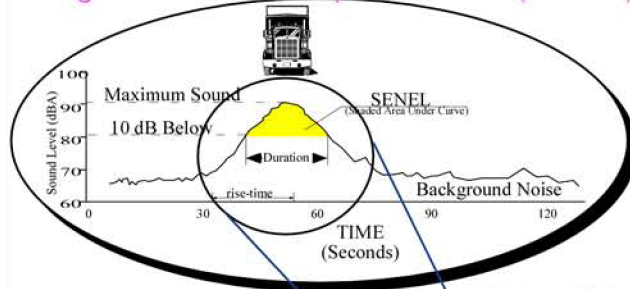
Source: Adapted from Vancouver International Airport, Noise Management Report.

SOURCE: Mestres Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

FIGURE 3.18-2

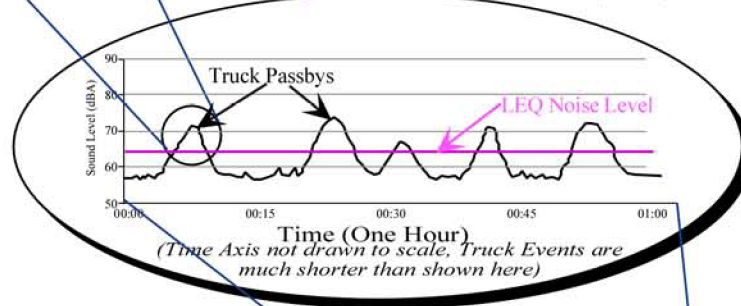
## The Effects of Weather on Sound Propagation

### Single Event Noise Exposure Level (SENEL)



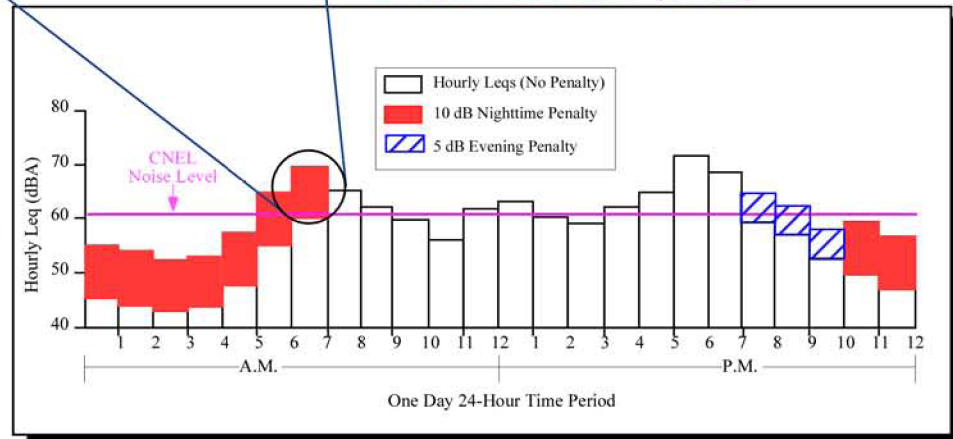
Single Event Noise

### One Hour Equivalent Noise Level (LEQ)



Hourly Noise

### 24-Hour Noise Level (CNEL)



24 Hour Noise

SOURCE: Mestre Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

FIGURE 3.18-3

Single and Cumulative Noise Metric Definitions

CNEL is graphically illustrated in the bottom of **Figure 3.18-3**. Examples of various noise environments in terms of CNEL are presented in **Figure 3.18-4, Examples of Typical Outdoor CNEL Levels**.

### **Day/Night Average Sound Level.**

The Day/Night Average Sound Level (DNL) index is very similar to CNEL; however, it only adds 10 dB to the measured noise levels occurring between the hours of 10:00 PM to 7:00 AM. Typically, DNL is about 1 dB lower than CNEL, although the difference may be greater if there is an abnormal concentration of noise events in the 7:00 to 10:00 PM period.

### **L(%), L<sub>max</sub> and L<sub>min</sub>**

L(%), L<sub>max</sub> and L<sub>min</sub> are statistical methods to account for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example since 5 minutes is 25 percent of 20 minutes, L(25) is the noise level that is equal to or exceeded for 5 minutes in a 20-minute measurement period. L(%) is typically used in noise ordinances and municipal codes. L<sub>max</sub> represents the loudest measured noise level. It only occurs for a fraction of a second; all other measured noise levels are less than L<sub>max</sub>. L<sub>min</sub> represents the quietest noise level during a noise measurement with all other measured noise levels greater than L<sub>min</sub>.

## **Adverse Effects of Noise Exposure**

Noise is known to have several adverse effects on humans, which has led to laws and standards being set to protect public health and safety, and to ensure compatibility between land uses and activities. Adverse effects of noise on people include hearing loss, communication interference, sleep interference, physiological responses, and annoyance. Each of these potential noise impacts on people are briefly discussed in the following narrative. Please refer to the Mestre-Greve report in **Appendix 3.18** for additional discussion on this topic.

## **Hearing Loss**

Hearing loss is generally not a community noise concern, even very near a major airport or a major freeway. The potential for noise induced hearing loss is more commonly associated with occupational noise exposures in heavy industry, very noisy work environments with long term exposure, or certain very loud recreational activities, such as target shooting, motorcycle or car racing, etc. The Occupational Safety and Health Administration (OSHA) identifies a noise exposure limit of 90 dB(A) for 8 hours per day to protect from hearing loss (higher limits are allowed for shorter duration exposures). Noise levels in neighborhoods, even in very noisy neighborhoods, are not sufficiently loud to cause hearing loss.

### *Communication Interference*

Communication interference is one of the primary concerns in environmental noise problems. Communication interference includes speech interference and interference with activities such as watching television. Noise can also interfere with communications within school classrooms, as well as classroom activities. Normal conversational speech is in the range of 60 to 65 dB(A) and any noise in this range or louder may interfere with speech. There are specific methods of describing speech interference as a function of distance between speaker and listener and voice level. **Figure 3.18-5, Speech Interference and Noise Levels**, shows the relation of quality of speech communication with respect to various noise levels.

### *Sleep Interference*

Noise can make it difficult to fall asleep, create momentary disturbances of natural sleep patterns by causing shifts from deep to lighter stages and cause awakening. Noise may even cause awakening that a person may or may not be able to recall.

### *Physiological Responses*

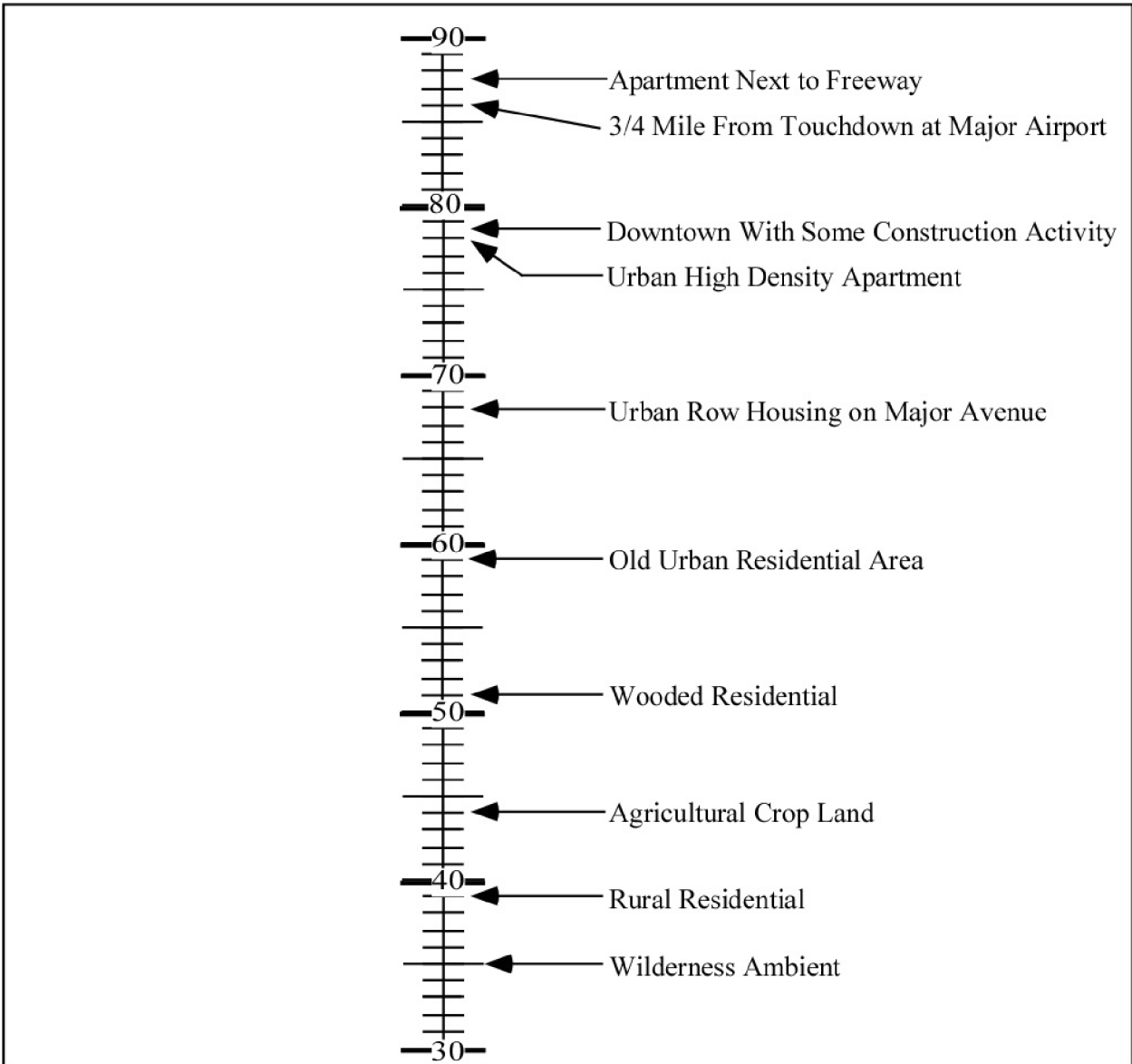
Physiological responses are those measurable effects of noise on people that are realized as changes in pulse rate, blood pressure, etc. Studies to determine whether exposure to high noise levels can adversely affect human health have concluded that, while a relationship between noise and health effects seems plausible, there is no empirical evidence of the relationship.

### *Annoyance*

Annoyance is the most difficult of all noise responses to describe. Annoyance is a very individual characteristic and can vary widely from person to person. Noise that one person considers tolerable can be unbearable to another of equal hearing capability. The level of annoyance depends both on the characteristics of the noise (including loudness, frequency, time, and duration), and how much activity interference (such as speech interference and sleep interference) results from the noise. However, the level of annoyance is also a function of the attitude of the receiver. Personal sensitivity to noise varies widely. It has been estimated that 2 to 10 percent of the population is highly susceptible to annoyance from any noise not of their own making, while approximately 20 percent are unaffected by noise. Attitudes may also be affected by the relationship between the person affected and the source of noise, and whether attempts have been made to abate the noise.



## CNEL Typical Outdoor Location

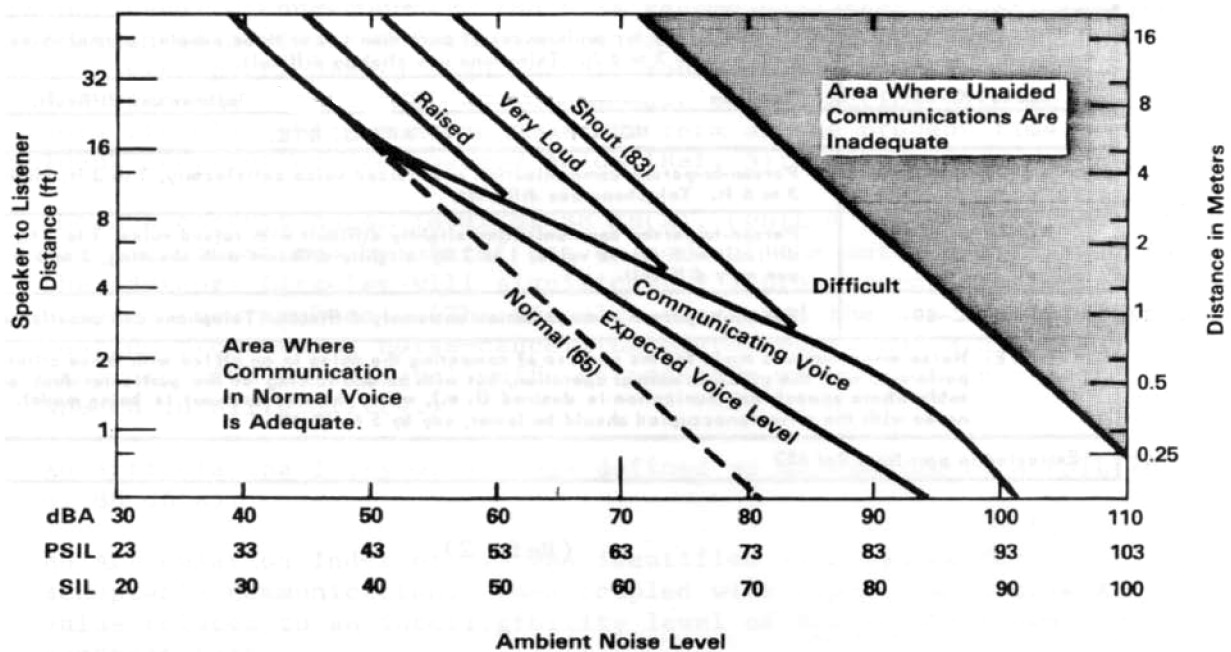


Source: Adapted from "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety", EPA, 1974

SOURCE: Mestres Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

FIGURE 3.18-4

Examples of Typical Outdoor CNEL Levels



**Permissible Distance Between a Speaker and Listeners for Specified Voice Levels and Ambient Noise Levels**

(The Levels in Parantheses Refer to Voice Levels Measured One Meter From the Mouth.)

SOURCE: Mestre Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

FIGURE 3.18-5

Speech Interference and Noise Levels

## Vibration

Vibration consists of waves transmitted through solid material. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be comprised of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or “spectrum” of many frequencies, and are generally classified as broadband or random vibrations. The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration is often measured in terms of the peak particle velocity (PPV) in inches per second (in/sec) because it best correlates with human perception.

Vibration energy attenuates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than low frequencies, so that in the far-field from a source, the low frequencies tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, there is usually a ground-to-foundation coupling loss, but the vibration can also be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows or of items on shelves, or the motion of building surfaces.

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of construction activities, especially pile driving. Road vehicles rarely create enough groundborne vibration to be perceptible to humans unless the road surface is poorly maintained and there are potholes or bumps. If traffic, typically heavy trucks, induces perceptible vibration in buildings, such as window rattling or shaking of small loose items, then it is most likely an effect of low-frequency airborne noise or ground characteristics.

Human annoyance by vibration is related to the number and duration of events. The more events or the greater the duration, the more annoying it will be to humans. `

## EXISTING CONDITIONS

### Predominant Noise Sources in the OVOV Planning Area

Motor vehicle noise on freeways and other roadways are the primary noise sources in the OVOV Planning Area. The Southern Pacific Railroad, which runs from the southern portion of the OVOV Planning Area to the center of the City of Santa Clarita and then directly to the east, is also a significant

noise source. The Southern Pacific Railroad line handles two types of trains in the Santa Clarita area: Metrolink commuter rail and freight. Of the two, freight rail noise is the more dominant noise source. Based on 2008 train schedules, 24 Metrolink trains traverse Santa Clarita Valley each day. No precise numbers of daily freight trains could be provided; however, it was estimated that 12 freight trains pass through the County's Planning Area each day. Although the Agua Dulce Airport is located in the study area, sporadic airplane or helicopter operations over the County's Planning Area are not loud and consistent enough to be significant.

### ***Noise Measurement Methodology***

Short-term noise measurements were taken at 20 locations within the OVOV Planning Area (see **Figure 3.18-6, Noise Measurement Locations**). The measurement locations were based upon a review of noise complaints, discussions with City of Santa Clarita staff, and identification of major noise sources in the community and their proximity to noise-sensitive land uses. From a noise perspective, typical sensitive receptors include residences, schools, child care centers, places of worship, hospitals, long-term health care facilities, convalescent centers, and retirement homes. Each of these land use types currently occur within the County's Planning Area.

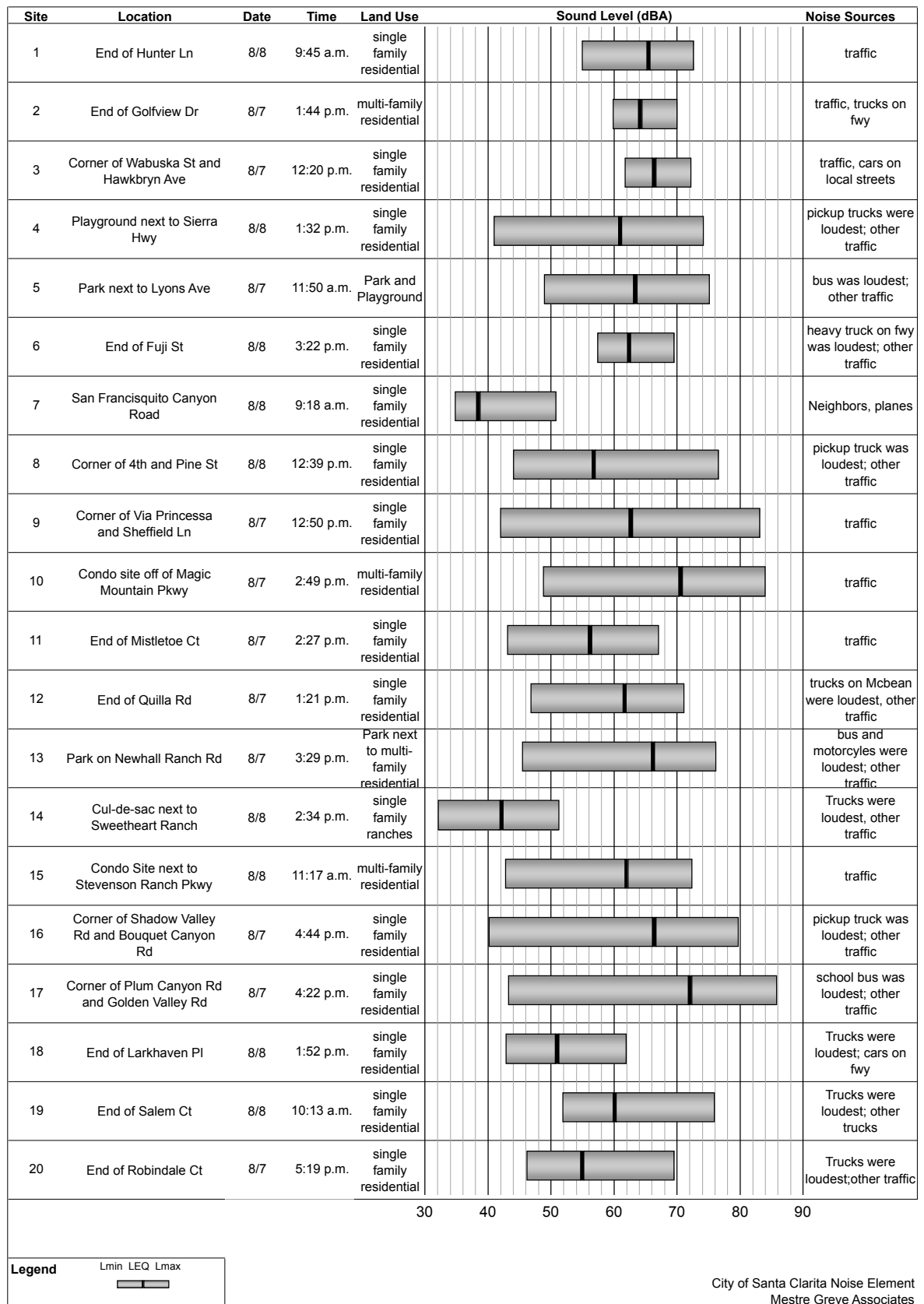
The measurements were taken on August 7 and 8, 2007, using a Bruel & Kjaer Type 2236 Sound Level Meter set at 5 feet above ground. The meter was calibrated every few hours. These noise measurement systems meet the American National Standards Institute "Type 1" specifications, which is the most accurate for community noise measurements. These noise measurements represent the specific period of monitoring and were done merely to provide a "snapshot" view of the noise environment. The noise measurement locations are depicted in **Figure 3.18-6**. Each monitoring location is described in the Mestre-Greve Associates report in **Appendix 3.18**.

### ***Noise Survey Results***

The results of the noise measurements are shown as  $L_{eq}$ ,  $L_{max}$ , and  $L_{min}$  in **Figure 3.18-7, Short-Term Ambient Noise Measurement Results**. These figures also depict the dates and times of the measurements. The noise levels measured cover a wide range of noise exposure throughout the OVOV Planning Area (the majority of the locations in the City of Santa Clarita) and are not to be interpreted as an assessment of noise impacts at these locations.



**Graphic Summary of Short-Term Ambient Noise Measurement Results**



SOURCE: Mestre Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

**FIGURE 3.18-7**



## Short-Term Ambient Noise Measurement Results

The cause of the loudest event is identified and the most predominant noise source(s) are identified. In almost all cases the major source of noise was motor vehicles, where buses and trucks created single event noise levels into the mid-80 dB(A) range. The quietest monitoring location was in a residential area in the back hills (this includes Site 7 located at the end of Stator Lane), where noise levels were often below 50 dB(A). In general, aircraft noise, industrial noise, and commercial noise sources did not appear to contribute significantly to the noise levels measured.

## Existing Noise Contours

Roadway and rail noise contours for existing conditions are illustrated in **Figure 3.18-8, Existing (2007) Noise Contours**, (distances to contour values are shown in tabulated format in the Mestre Greve Associates report in **Appendix 3.18**). The noise contours for arterial roadways and highways were generated using a mathematical model developed by the FHWA (Traffic Noise Model, Version 2.5, April 14, 2004). The Traffic Noise Model (TNM) uses traffic volume, vehicle mix,<sup>1</sup> day/evening/night traffic distribution,<sup>2</sup> average vehicle speed, roadway geometry, and sound propagation path characteristics to predict hourly A-weighted  $L_{eq}$  values adjacent to a road. The vehicle mix and day/evening/night distributions are provided in the Mestre Greve Associates report in **Appendix 3.18**. Rail noise contours were based upon documents on existing rail operations in the Santa Clarita Valley: Multi-County Goods Movement Action Plan (April, 2008) and the draft 2008 Long Range Transportation Plan (LRTP) for the Metrolink system.

Noise contours in **Figure 3.18-8** are for the 60, 65, and 70 dB CNEL noise levels and represent lines of equal noise exposure. The 60 dB CNEL contour defines the Noise Referral Zone. This is the lowest noise level for which noise considerations should be included when making land use policy decisions.

The noise contours presented in **Figure 3.18-8** do not take intervening topography or structures into account. Variable terrain, the built environment, and intervening natural or constructed barriers have a very complex effect on the propagation of noise; therefore, the contours present a worst-case projection of existing noise levels. As a result, the contours should not be used for site planning purposes.

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<sup>1</sup> Vehicle mix is reported in terms of the number of automobiles, medium trucks, and heavy trucks, with heavy truck categories defined by the number of axels. For arterial roadways the vehicle mix data are obtained from data collected by the County of Orange during extensive surveys of 53 intersections within the County. Caltrans data for truck percentages for state and federal highways were used.

<sup>2</sup> Vehicle distribution over the 24-hour day is defined as the percent of vehicles in the daytime (7:00 AM to 7:00 PM, evening (7:00 PM to 10:00 PM), and night (10:00 PM to 7:00 AM).

## REGULATORY FRAMEWORK

### Federal Requirements

#### *Noise*

There are no federal noise requirements or regulations that bear directly on local actions of the County. However, there are federal regulations that influence the audible landscape, especially for projects where federal funding is involved. The FHWA requires abatement of highway traffic noise for highway projects through rules in the Code of Federal Regulations (23 CFR Part 772), the Federal Transit Administration (FTA), and Federal Railroad Administration (FRA). Each agency recommends thorough noise and vibration assessments through comprehensive guidelines for any highway, mass transit, or high-speed railroad projects that would pass by residential areas. For housing constructed with assistance from the US Department of Housing and Urban Development, minimum noise insulation standards must be achieved (24 CFR Part 51, Subpart B).

The Federal Aviation Administration (FAA) has prepared guidelines for acceptable noise exposure in its Federal Aviation Regulations (FAR) Part 150 Noise Compatibility Planning program for airports. The program is aimed at balancing an airport's operational needs and its impact on the surrounding community. Its purpose is to reduce noise impacts on existing incompatible land use and to prevent the introduction of new incompatible land uses in the areas impacted by aircraft noise. It establishes standard noise methodologies and noise metrics, identifies land uses normally compatible with various levels of airport noise, and provides for voluntary development and submission of noise exposure maps and noise compatibility programs by airport operators.

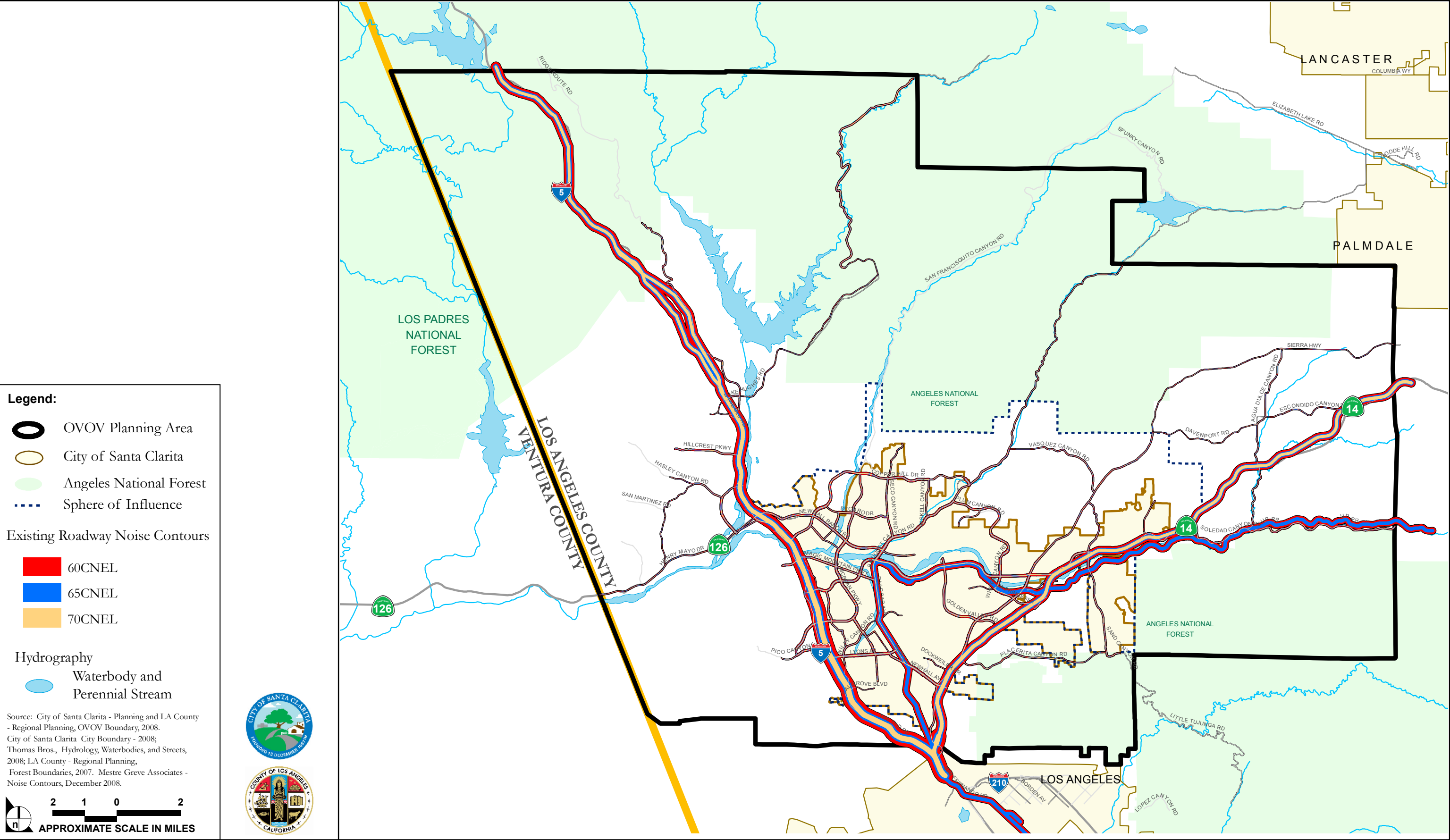
#### *Vibration*

The Federal Transit Administration (FTA) has published guidelines for assessing the impacts of groundborne vibration associated with construction activities, which have been applied by other jurisdictions to other types of projects. The FTA measure of the threshold of architectural damage for non-engineered timber and mason buildings (e.g., residential units) is 0.2 in/sec PPV.<sup>3</sup> The threshold of perception of vibration is 0.01 in/sec PPV.

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<sup>3</sup> Federal Transit Administration, Office of Planning and Environment, *Transit Noise and Vibration Impact Assessment* FTA-VA-90-1003-06 (Washington, D.C., Federal Transit Administration, May 2006), p. 12-13.





SOURCE: City of Santa Clarita General Plan Update Noise Element - 2009

FIGURE 3.18-8

There are no FHWA standards for traffic-related vibrations. The FHWA position is that highway traffic and construction vibrations pose no threat to buildings and structures.<sup>4</sup>

## State Regulations

### Noise

#### Title 24, California Code of Regulations

The California Noise Insulation Standards of 1988 (California Code of Regulations Title 24, Section 3501 et seq.) require that interior noise levels from exterior sources be reduced to 45 dB(A) or less in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed. Measurements are based on  $L_{dn}$ <sup>5</sup> or CNEL. Where exterior noise levels exceed 60 dB(A)  $L_{dn}$ /CNEL, an acoustical analysis is required to show that the proposed construction will reduce interior noise levels to 45 dB(A)  $L_{dn}$ /CNEL.

#### California Government Code Section 63502(g)

The State of California Department of Health Services, Environmental Health Division, has published *Guidelines for Noise and Land Use Compatibility* (the *State Guidelines*).<sup>6</sup> The *State Guidelines*, illustrated in **Figure 3.18-9, State Land Use Compatibility Guidelines for Noise**, indicate that residential land uses and other noise-sensitive receptors generally should locate in areas where outdoor ambient noise levels do not exceed 65 to 70 dB(A) (CNEL or  $L_{dn}$ ). The Department of Health Services does not mandate application of this compatibility matrix to development projects; however, each jurisdiction is required to consider the *State Guidelines* when developing its general plan noise element and when determining acceptable noise levels within its community. The State Department of Housing and Community Development does require, however, that new multi-family units not be exposed to outdoor ambient noise levels in excess of 65 dB(A) (CNEL or  $L_{dn}$ ), and that, if necessary, sufficient noise insulation be provided to reduce interior ambient levels to 45 dB(A)  $L_{dn}$ /CNEL. The US Environmental Protection Agency (US EPA) identified a maximum indoor noise level of 45 dB(A) as necessary to protect against

<sup>4</sup> California Department of Transportation, *Transportation Related Earthborne Vibrations (Caltrans Experiences)*, Technical Advisory, Vibration TAV-02-01-R9601 (Sacramento, California: California Department of Transportation, February 20, 2002), p. 10.

<sup>5</sup> Like CNEL,  $L_{dn}$  is a 24-hour  $L_{eq}$  with 10 dB(A) added during the nighttime hours (10:00 PM to 7:00 AM). It is, therefore, less restrictive than CNEL.

<sup>6</sup> These guidelines are also published in *State of California General Plan Guidelines*, Appendix C: Guidelines for the Preparation and Content of the Noise Element of the General Plan (Sacramento, California: Governor's Office of Planning and Research, October 2003).

sleep interference. Assuming a conservative structural noise insulation of 20 dB for typical dwellings, 45 dB(A) corresponds to an outdoor CNEL of 65 dB(A) as minimizing sleep interference.

Under the *State Guidelines*, an exterior noise level of 70 dB(A)  $L_{dn}/CNEL$  is typically the dividing line between an acceptable and unacceptable exterior noise environment for all noise-sensitive uses, including schools, libraries, places of worship, hospitals, day care centers, and nursing homes of conventional construction. Noise levels below 75 dB(A)  $L_{dn}/CNEL$  are typically acceptable for office and commercial buildings, while levels up to 80 dB(A)  $L_{dn}/CNEL$  are typically acceptable for industrial uses. In unacceptable interior noise environments, additional noise insulation features, such as extra batting or resilient channels<sup>7</sup> in exterior walls, double-paned windows, air conditioners to enable occupants to keep their windows closed without compromising their comfort, solid wood doors, and noise baffles on exterior vents, are typically needed to provide acceptable interior noise levels. The best type of noise insulation is based on detailed acoustical analyses that identify all practical noise insulation features and that confirm their effectiveness.

## ***Vibration***

There are no state standards for traffic-related vibrations. California Department of Transportation's (Caltrans) position is that highway traffic and construction vibrations generally pose no threat to buildings and structures.<sup>8</sup> For continuous (or steady-state) vibrations; however, Caltrans considers the architectural damage risk level to be somewhere between 0.2 and 2.0 inches/second.<sup>9</sup>

## **County of Los Angeles Noise Ordinance**

### ***Noise***

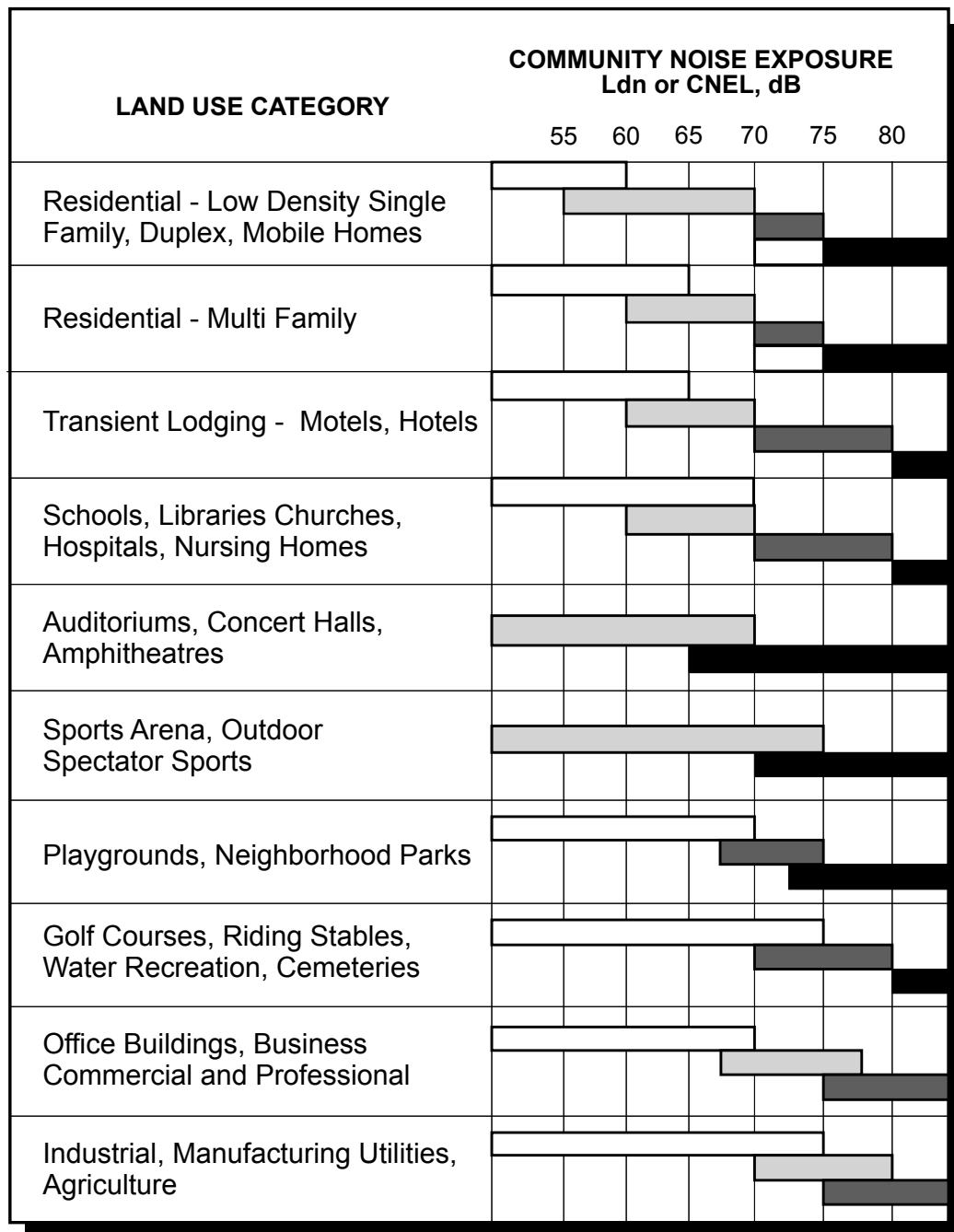
Chapter 12.08 of Title 12 of the Los Angeles County Code, entitled "Noise Control Ordinance of the County of Los Angeles," as amended, identifies exterior noise standards for point noise sources, specific noise restrictions, exemptions, and variances for exterior point and stationary noise sources. Several of these are applicable to the proposed project and are discussed below.

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<sup>7</sup> A resilient channel is a pre-formed section of sheet metal approximately 0.5-inch deep by 2.5-inches wide by 12-inches long that is installed between wallboard panels and framing to reduce sound transmission through walls. By preventing the wallboard from lying against the studs, the channel inhibits the transmission of sound through the framing.

<sup>8</sup> California Department of Transportation, *Transportation Related Earthborne Vibrations (Caltrans Experiences)*, Technical Advisory, Vibration TAV-02-01-R9601 (Sacramento, California: California Department of Transportation, February 20, 2002), p. 10.

<sup>9</sup> California Department of Transportation, *Transportation Related Earthborne Vibrations (Caltrans Experiences)*, Technical Advisory, Vibration TAV-02-01-R9601 (Sacramento, California: California Department of Transportation, February 20, 2002), p. 12.



- NORMALLY ACCEPTABLE**  
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
- CONDITIONALLY ACCEPTABLE**  
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
- NORMALLY UNACCEPTABLE**  
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise reduction features included in the design.
- CLEARLY UNACCEPTABLE**  
New construction or development should generally not be undertaken.

**SOURCE:** California Governor's Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Guidelines for the Preparation and Content of Noise Elements of the General Plan, October 2003.

FIGURE 3.18-9

The County Noise Ordinance states that exterior noise levels caused by point noise sources shall not exceed the levels identified in **Table 3.18-2, County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources**, or the ambient noise level,<sup>10</sup> whichever is greater, when the ambient noise level is determined without the noise source operating. The Noise Ordinance Section 12.08.400, also states that interior noise levels resulting from outside point or stationary sources within multi-family residential units shall not exceed 45 dB(A)  $L_{eq}$  between 7:00 AM and 10:00 PM, and 40 dB(A)  $L_{eq}$  between 10:00 PM and 7:00 AM.<sup>11</sup>

The County Noise Ordinance identifies specific restrictions regarding construction noise. The operation of equipment used in construction, drilling, repair, alteration or demolition work is prohibited between weekday hours of 7:00 PM to 7:00 AM and anytime on Sundays or legal holidays if such noise would create a noise disturbance across a residential or commercial real-property line.<sup>12</sup> The Noise Ordinance further states that the contractor shall conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in **Table 3.18-3, County of Los Angeles Construction Equipment Noise Restrictions**. All mobile and stationary internal-combustion-powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order.

The County exempts all vehicles of transportation (with a few exceptions) that operate in a legal manner within the public right-of-way, railway, or air space, or on private property, from the standards of the Noise Ordinance. The County has no adopted ordinance regulating individual motor vehicle noise levels. These are regulated by the state.

While the County of Los Angeles has not formally adopted the State Land Use Compatibility Guidelines for Noise in its current Noise Element, the County defers to the guidelines in its environmental documents.

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<sup>10</sup> The existing background noise level at the time of measurement or prediction.

<sup>11</sup> This requirement is consistent with the California Noise Insulation Standards of 1988 (California Building Code Title 24, Section 3501 et seq.), which establishes inter-dwelling (between units in a building) and exterior sound transmission control measures. It requires that interior noise levels from the exterior source be reduced to 45 decibels (dB) or less in any habitable room of a multi-residential use facility (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings. Measurements are based on a day/night average sound level ( $L_{dn}$ ) or the community noise equivalent level (CNEL). Both  $L_{dn}$  and CNEL utilize averaging, not single-event exposure.

<sup>12</sup> County of Los Angeles Ordinance No. 11743, Section 12.08.440. Noise disturbance is not defined in the noise ordinance. The County Health Officer has the authority to define and determine the extent of a noise disturbance on a case-by-case basis.

**Table 3.18-2**  
**County of Los Angeles Exterior Noise Standards**  
**for Stationary and Point Noise Sources**

Noise Zone	Designated Noise Zone Land Use (Receptor Property)	Time Interval	Exterior Noise Level dB(A) $L_{eq}^1$
I	Noise Sensitive Area <sup>2</sup>	Anytime	45
II	Residential Properties	10:00 PM to 7:00 AM	45
		7:00 AM to 10:00 PM	50
III	Commercial Properties	10:00 PM to 7:00 AM	55
		7:00 AM to 10:00 PM	60
IV	Industrial Properties	Anytime	70

Source: County of Los Angeles Ordinance No. 11743, Section 12.08.390.

<sup>1</sup> **Standard No. 1** shall be the exterior noise level which may not be exceeded for a cumulative period of more than 30 minutes in any hour. Standard No. 1 shall be the applicable noise level; or, if the ambient  $L_{50}$  exceeds the forgoing level, then the ambient  $L_{50}$  becomes the exterior noise level for Standard No. 1.

**Standard No. 2** shall be the exterior noise level which may not be exceeded for a cumulative period of more than 15 minutes in any hour. Standard No. 2 shall be the applicable noise level from Standard 1 plus 5 dB(A); or, if the ambient  $L_{25}$  exceeds the forgoing level, then the ambient  $L_{25}$  becomes the exterior noise level for Standard No. 2.

**Standard No. 3** shall be the exterior noise level which may not be exceeded for a cumulative period of more than 5 minutes in any hour. Standard No. 3 shall be the applicable noise level from Standard 1 plus 10 dB(A); or, if the ambient  $L_{8.3}$  exceeds the forgoing level, then the ambient  $L_{8.3}$  becomes the exterior noise level for Standard No. 3.

**Standard No. 4** shall be the exterior noise level which may not be exceeded for a cumulative period of more than 1 minute in any hour. Standard No. 4 shall be the applicable noise level from Standard 1 plus 15 dB(A); or, if the ambient  $L_{1.7}$  exceeds the forgoing level, then the ambient  $L_{1.7}$  becomes the exterior noise level for Standard No. 4.

**Standard No. 5** shall be the exterior noise level which may not be exceeded for any period of time. Standard No. 5 shall be the applicable noise level from Standard 1 plus 20 dB(A); or, if the ambient  $L_0$  exceeds the forgoing level, then the ambient  $L_0$  becomes the exterior noise level for Standard No. 4.

<sup>2</sup> Not defined in the County Noise Ordinance. To be designated by the County Health Officer.

**Table 3.18-3**  
**County of Los Angeles Construction Equipment Noise Restrictions**

Residential Structures			
	Single Family Residential	Multi-Family Residential	Semi-Residential/ Commercial <sup>1</sup>
Mobile Equipment: Maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days) of mobile equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	75 dB(A) L <sub>eq</sub>	80 dB(A) L <sub>eq</sub>	85 dB(A) L <sub>eq</sub>
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	60 dB(A) L <sub>eq</sub>	64 dB(A) L <sub>eq</sub>	70 dB(A) L <sub>eq</sub>
Stationary Equipment: Maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment:			
Daily, except Sundays and legal holidays, 7:00 AM to 8:00 PM	60 dB(A) L <sub>eq</sub>	65 dB(A) L <sub>eq</sub>	70 dB(A) L <sub>eq</sub>
Daily, 8:00 PM to 7:00 AM and all day Sunday and legal holidays	50 dB(A) L <sub>eq</sub>	55 dB(A) L <sub>eq</sub>	60 dB(A) L <sub>eq</sub>
Business Structures			
	All Structures		
Mobile Equipment; Maximum noise levels for nonscheduled, intermittent, short-term operation of mobile equipment:			
Daily, including Sunday and legal holidays, all hours	85 dB(A) L <sub>eq</sub>		

Source: County of Los Angeles Ordinance No. 11743, Section 12.08.440.

<sup>1</sup> Refers to residential structures within a commercial area. This standard does not apply to commercial structures.

## ***Vibration***

With respect to groundborne vibration caused by construction activities, Section 12.08.560 of the County's Noise Ordinance governs vibration:

*Operating or permitting the operation of any device that creates vibration which is above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The perception threshold shall be a motion velocity of 0.01 inches/second over the range of 1 to 100 Hertz. (Ord. 11778 Section 2 [Art. 5 Section 501 (d)], 1978; Ord 11773 Section 2 [Art. 5 Section 501(s)], 1978.)*

Under Section 12.08.560, the project would result in a significant vibration impact if the vibration exceeds a motion velocity of 0.01 inch/second over the range of 1 to 100 Hertz.

## THRESHOLDS OF SIGNIFICANCE

The following thresholds of significance are based on the Appendix G of the *State CEQA Guidelines*, the State Land Use Compatibility Guidelines for Noise, as well as the noise standards outlined in the County's Noise Ordinance.

### Construction Thresholds

If construction noise levels within the County's Planning Area would be in violation of the County Noise Ordinance and County of Los Angeles Construction Equipment Noise Restrictions, a significant construction noise impact would occur.

If construction creates vibration at or beyond the property boundary that is in exceedance of the vibration perception threshold of 0.01 inch/second over the range of 1 to 100 Hertz, a significant vibration impact would occur.

### Operational Thresholds

#### *Stationary Source Noise Thresholds*

County's Ordinance:

Should stationary source noise from activities within the unincorporated area of the County of Los Angeles exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources, a significant noise impact would occur.

#### *Mobile Source Noise Thresholds*

The proposed Area Plan would result in a significant mobile source noise impact if future development in the County's Planning Area would generate traffic that would cause exterior use areas to be exposed to continuous noise levels greater than those identified in the *State Land Use Compatibility Guidelines* (for land in unincorporated areas)<sup>13</sup> or the *City's Land Use Compatibility Guidelines* (for land within the City) for the affected land use

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<sup>13</sup> As previously stated, the County defers to the *State Land Use Compatibility Guidelines*.



Additionally, a significance threshold of 5 dB is used for a change in environmental noise that occurs slowly over a long period of time. Therefore, a significant mobile source noise impact would occur if a roadway link within the OVOV Planning Area experiences a sound level increase of 5 dB or greater at buildout of the Planning Area.

Noise generated by emergency vehicles is not under the control of the County. The County noise ordinance exempts emergency operations from noise regulation. The state has preempted local jurisdictions from controlling noise generated by emergency equipment. The use of sirens on police vehicles, ambulances, and fire trucks cannot be controlled by the County. Similarly, emergency flights of helicopters and airplanes cannot be controlled by the County. Therefore, there is no threshold of significance for emergency vehicles.

### ***Interior Noise Thresholds***

Should buildout of the proposed Area Plan cause interior noise levels from exterior sources to exceed 45 dB(A)  $L_{eq}$  between 7:00 AM and 10:00 PM, or 40 dB(A)  $L_{eq}$  between 10:00 PM and 7:00 (e.g., hotels, motels, dormitories, long-term care facilities, and apartment houses and other dwellings, except detached single-family dwellings) with doors and windows closed, a significant noise impact would occur.

## **IMPACT ANALYSIS**

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on noise within the County's Planning Area using the *State CEQA Guidelines* threshold of significance, the State Land Use Compatibility Guidelines for Noise, as well as the noise standards outlined in the County's Noise Ordinance.

### **Construction Impacts**

**Impact 3.18-1                      Potentially significant construction noise and vibration impacts could occur in unincorporated portions of the OVOV Planning Area during buildout.**

### ***Noise***

Construction noise would occur with the development of the proposed Area Plan. Usually, construction noise is of relatively short duration, lasting from a few days to a period of several months, and consists of one to four phases.

In general, the first and noisiest stage is site preparation, which usually involves existing structure removal, earth moving, compaction of soils and the removal of excess materials. High noise levels created during this phase would be associated with the operation of heavy-duty trucks, scrapers, graders, backhoes, and front-end loaders. When construction equipment is operating, noise levels can range from 73 to 96 dB(A) at a distance of 50 feet from individual pieces of equipment.

During the second stage of construction, foundation forms are constructed and concrete foundations are poured. Primary noise sources include heavy concrete trucks and mixers, cranes, and pneumatic drills. At 50 feet from the source, noise levels in the 70 to 90 dB(A) range are common. The third and fourth stages consist of interior and facade construction, and site cleanup. Primary noise sources associated with the third phase include hammering, diesel generators, compressors, and light truck traffic. Noise levels are typically in the 60 to 80 dB(A) range at a distance of 50 feet.

The final stages typically involves the use of trucks, landscape rollers and compactors, with noise levels in the 65 to 75 dB(A) range. Consequently, as development occurs within the OVOV Planning Area, noise levels within the County's Planning Area would occasionally be in violation of County Noise Ordinance and County of Los Angeles Construction Equipment Noise Restrictions

Implementation of **Policies N 1.1.1 to N 1.1.4, N 1.1.6, N 2.1.2, N 3.1.3, and N 3.1.4** would reduce construction source noise through development review and comment, implementation of adopted noise ordinance and code provisions, use of noise-absorbing barriers where appropriate, and regulating noise from construction activities near residential neighborhoods.

### ***Vibration***

Ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can achieve the audible range and be felt in buildings very close to the site. The primary and most intensive vibration source associated with the proposed Area Plan would be the use of bulldozers and pile drivers during construction. These types of equipment can create intense noise that is disturbing and can result in ground vibrations.

The results from vibration can range from no perceptible effects at the lowest vibration levels to low rumbling sounds and perceptible vibrations at moderate levels, and to slight structural damage at the highest levels. Ground vibrations from construction activities rarely reach the levels that can damage structures, but they can achieve the audible and perceptible ranges in buildings close to the construction site. **Table 3.18-4, Vibration Source Levels for Construction Equipment**, lists vibration source levels for construction equipment.

As indicated in **Table 3.18-4**, pile drivers and large bulldozers are capable of producing approximately 1.5 and 0.09 in/sec respectively, at 25 feet. Existing and proposed land uses in and around the proposed Area Plan consist of uses considered to be sensitive. Depending on the location of operations of construction equipment near these areas, there the potential for construction activities, such as pile driving, to exceed the vibration perception threshold of 0.01 inch/second

**Table 3.18-4**  
**Vibration Source Levels for Construction Equipment**

<b>Equipment</b>		<b>in/sec at 25 feet</b>
Pile driver (impact)	Upper Range	1.518
	Typical	0.644
Pile driver (vibratory)	Upper Range	0.734
	Typical	0.170
Clam shovel drop (slurry wall)		0.202
Hydromill (slurry wall)	In soil	0.008
	In rock	0.017
Large bulldozer		0.089
Caisson drilling		0.089
Loaded trucks		0.076
Jackhammer		0.035
Small bulldozer		0.003

*Source: Office of Planning and Environment, Federal Transit Administration, Transit Noise and Vibration Impact Assessment (May 2006) FTA-VA-90-1003-06, 12-9.*

Implementation of **Policies N 1.1.1 to N 1.1.4, N 1.1.6, N 2.1.2, N 3.1.3, and N 3.1.4** would reduce construction source noise through development review and comment, implementation of adopted noise ordinance and code provisions, use of noise-absorbing barriers where appropriate, and regulating noise from construction activities near residential neighborhoods.

### ***Proposed Area Plan Policies***

**Policy N 1.1.1:** Use the Noise and Land Use Compatibility Guidelines contained in Figure N 8, which are consistent with State guidelines, as a policy basis for decisions on land use and development proposals related to noise.

- Policy N 1.1.2:** Continue to implement the adopted Noise Ordinance and other applicable code provisions, consistent with state and federal standards, which establish noise impact thresholds for noise abatement and attenuation, in order to reduce potential health hazards associated with high noise levels.
- Policy N 1.1.3:** Include consideration of potential noise impacts in land use planning and development review decisions.
- Policy N 1.1.4:** Control noise sources adjacent to residential, recreational, and community facilities, and those land uses classified as noise sensitive.
- Policy N 1.1.6:** Provide development review comments on projects proposed by other agencies and special districts that may generate noise impacts affecting land uses within the Santa Clarita Valley, including any freeway and high-speed rail projects.
- Policy N 2.1.2:** Encourage the use of noise absorbing barriers, where appropriate.
- Policy N 3.1.3:** Through enforcement of the applicable Noise Ordinance, protect residential neighborhoods from noise generated by machinery or activities that produce significant discernable noise exceeding recommended levels for residential uses.
- Policy N 3.1.4:** Require that those responsible for construction activities develop techniques to mitigate or minimize the noise impacts on residences, and adopt standards that regulate noise from construction activities that occur in or near residential neighborhoods.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed policies are designed to reduce construction source noise through development review and comment, implementation of adopted noise ordinance and code provisions, use of noise-absorbing barriers where appropriate, and regulating noise from construction activities near residential neighborhoods. Nonetheless, construction noise impacts under the proposed Area Plan could be in violation of the County Noise Ordinance and County of Los Angeles Construction Equipment Noise Restrictions, and a significant noise impact could occur.

None of the proposed policies address vibration impacts. In the event that construction creates vibration at or beyond the property boundary that is in exceedance of the vibration perception threshold of 0.01 inch/second over the range of 1 to 199 Hertz, a significant vibration impact would occur.

## Plan to Plan Analysis

Both the existing and proposed Area Plans provide policies that would ensure for designed to minimize construction noise impacts through development review, implementation of noise ordinances and code provisions. However depending upon the location of sensitive land uses, construction activities could present significant noise issues in both the existing and proposed Plans. Vibration is not an issue that is discussed in either the existing or proposed Plan. Impacts to noise would be the same under both Plans.

## Operational Impacts

**Impact 3.18-2      Future stationary noise levels would not exceed County of Los Angeles Exterior Noise Standards for Stationary and Point Noise Sources; new vehicular traffic and rail noise within the City of Santa Clarita would not cause a 5 dB or greater increase in the ambient noise environment.**

**Buildout of the OVOV Planning Area could cause exterior use areas to be exposed to continuous noise levels greater than those identified in the *State Land Use Compatibility Guidelines* for the affected land use, which are used by the County of Los Angeles to determine noise impacts, and result in a potentially significant noise impact.**

## *Stationary Source Noise*

The primary sources of stationary noises in the County's Planning Area include Six Flags Magic Mountain and special events.

### **Six Flags Magic Mountain**

Six Flags Magic Mountain is an amusement park located southwest of the I-5/SR-14 interchange. The park operates a large number of thrill rides, including 17 roller coasters, live entertainment, and periodic firework displays. The fireworks displays occur predominantly during the summer months and at Thanksgiving and Christmas. With the exception of the display on July 4, which typically lasts 15 minutes, the displays last between 1 and 2 minutes. All displays occur before 10:00 PM. Fireworks are an impulsive noise source, which means, under Section 12.08.190 of the County's Noise Ordinance, that it is of short duration, usually less than 1 second and of high intensity, with an abrupt onset and rapid decay. The noise levels and hours of operation around the park vary considerably depending on the time

of day, the day of the week, the presence of holidays, and the season of the year. The noise levels generated by park activities can be heard for a considerable distance around the park at certain times.

No applicable threshold of significance exists for the impact that the impulsive noise that the permitted fireworks displays would have on the project site. For some future residents along the eastern edge of the project, regular and visible short-term fireworks displays may be desirable. Noise from fireworks may be considered a nuisance by other residents, particularly if the displays are not visible from their residences.

### **Special Events**

Special events, such as outdoor concerts, may be held on an irregular or regular basis. Control of noise sources on private property is not typically part of the Area Plan, but is rather under the purview of the County Code. The Los Angeles County Noise Ordinance, contained in Chapter 12.08 of the County Code, includes specific noise limits that cannot be exceeded at the property boundary. The limits vary depending on the time of day and land uses involved.

### ***Mobile Source Noise***

#### **Traffic Noise**

Traffic volumes would continue to increase in the OVOV Planning Area as it builds out, and traffic noise levels would increase correspondingly. The following analysis compares existing traffic noise levels along selected roadway segments with projected traffic noise levels under the existing Area Plan and General Plan and under the proposed Area Plan and General Plan. Of the 318 roadway links analyzed in the traffic report (**Appendix 3.2**), 27 roadway segments were determined to experience a cumulative noise increase of 5 dB or greater under the existing Area Plan and General Plan (see **Table 3.18-5, Sound Level Comparison: Existing Conditions and Existing Area Plan and General Plan Buildout Conditions**), and 29 roadway segments were determined to experience a cumulative noise increase of 5 dB or greater under the proposed Area Plan and General Plan (see **Table 3.18-6, Sound Level Comparison: Existing Conditions and OVOV Buildout Conditions**). Eighteen of these segments which are identified in both **Tables 3.18-5 and 3.18-6** are in unincorporated Los Angeles County, while the remaining are within the City of Santa Clarita. These segments included:

- Agua Dulce Canyon Road n/o Davenport Road
- Agua Dulce Canyon Road n/o SR-14
- Chiquito Canyon (Long Canyon) n/o SR-126

- Franklin e/o Wolcott Way
- Golden Valley Road s/o Plum Canyon
- Hasley Canyon Rd. w/o Del Valle Road
- Henry Mayo e/o Commerce Center
- Lake Hughes Road e/o Castaic
- Lake Hughes Rd. e/o Ridge Route
- Lost Canyon Road s/o Via Princessa
- Magic Mountain Parkway w/o The Old Road
- Pico Canyon Road w/o Stevenson Ranch Parkway
- Ridge Route Road n/o Lake Hughes Road
- San Martinez Grande Canyon n/o SR-126
- The Old Road n/o Hillcrest Parkway
- Valencia Pkwy w/o The Old Road
- Via Princessa n/o Lost Canyon Road
- Wolcott Way n/o SR-126

A cumulative noise level increase of 5 dB or greater is a significant noise impact. Buildout of the proposed Area Plan and General Plan would result in two or more roadways experiencing a noise level increase of 5 dB or greater when compared to buildout under the existing Area Plan and General Plan.

**Table 3.18-5**  
**Sound Level Comparison: Existing Conditions and Existing Area Plan and General Plan Buildout Conditions**

Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing Noise Level	Existing General Plan and Area Plan Buildout Noise Level
2	Agua Dulce Cyn Rd n/o Davenport Rd. <sup>3</sup>	LA	Sparse Residential	63.5	69.8
3	Agua Dulce Cyn Rd. n/o SR-14 <sup>3</sup>	LA	Open Space	83.9	86.7
4	Agua Dulce Cyn Rd. s/o SR-14 <sup>3</sup>	LA	Open Space	83.8	86.6
8	Ave Stanford s/o Vanderbilt	SC	Commercial	NA	NA
29	Chiquito Cyn (Long Cyn) n/o SR-126 <sup>3</sup>	LA	Open Space	NA	NA
41	Copper Hill Dr. e/o Haskell Cyn Rd.	SC/SOI	Residential	62.9	68.5
43	Davenport e/o Sierra Hwy	LA	Commercial	55.8	58.8
53	Dockweiler Dr. w/o Sierra Hwy	SC	Sparse Residential	59.7	66.7
55	Franklin e/o Wolcott Way <sup>3</sup>	LA	Open Space	NA	NA
57	Golden Valley Rd. s/o Plum Cyn <sup>3</sup>	SC/SOI	Residential	61.7	75.1
68	Hasley Cyn Rd. w/o Del Valle Rd. <sup>3</sup>	LA	Open Space	59.2	64.8
72	Henry Mayo Dr e/o Commerce Center	LA	Residential	62.9	68.2
77	Lake Hughes Rd. e/o Castaic <sup>3</sup>	LA	Mixed	65.5	72.3
78	Lake Hughes Rd. e/o Ridge Route <sup>3</sup>	LA	Commercial	60.4	68.1
84	Lost Cyn Rd n/o Jakes Way	LA	Residential	0	70.2
85	Lost Cyn Rd n/o Canyon Park	LA	Residential	0	68.5
87	Lost Cyn Rd s/o Via Princessa <sup>3</sup>	SC/LA	Residential	67.3	70.4
98	Magic Mtn Pkwy w/o The Old Road <sup>3</sup>	LA	Open Space	70.7	74.6
105	Magic Mtn Pkwy e/o Valencia	SC	Mixed	70.6	74.2
128	Newhall Ranch Rd. e/o Bouquet Cyn Rd	SC	Mixed	65.8	73.8
143	Pico Cyn Rd. w/o Stevenson Rnch Pkwy <sup>3</sup>	LA	Residential	63.5	73.3
161	Ridge Route Rd. n/o Lake Hughes Rd. <sup>3</sup>	LA	Mixed	64.3	72.9



Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing General Plan and Area Plan	
				Existing Noise Level	Buildout Noise Level
162	Ridge Route n/o Castaic	LA	Commercial	64.3	63.4
172	San Martinez Grande Cyn n/o SR-126 <sup>3</sup>	LA	Open Space	NA	NA
238	The Old Road n/o Hillcrest Pkwy <sup>3</sup>	LA	Mixed	68.5	71.1
254	Ave. Tibbitts s/o Newhall Ranch Rd.	SC	Commercial	62.3	68.1
262	Valencia Pkwy w/o The Old Road <sup>3</sup>	LA	Residential	69.1	73.7
276	Via Princessa e/o Oak Ridge	SC	Residential	NA	NA
279	Via Princessa w/o Rainbow Glen Dr.	SC	Residential	NA	NA
280	Via Princessa e/o Rainbow Glen Dr.	SC	Residential	NA	NA
283	Via Princessa n/o Lost Cyn Rd. <sup>3</sup>	LA	Residential	66.6	69.2
290	Wiley Cyn Rd e/o Orchard Village Rd.	SC	Residential	67.1	70.5
293	Wiley Cyn Rd s/o Lyons Ave	SC	Residential	61.2	65.1
294	Wiley Cyn Rd n/o Calgrove	SC	Residential	62.3	67.2
295	Wolcott Way n/o SR-126 <sup>3</sup>	LA	Open Space	NA	NA

**Table 3.18-6**  
**Sound Level Comparison: Existing Conditions and OVOV Buildout Conditions**

Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing Noise Level	OVOV Planning Area Buildout Noise Level	Cumulative Increase
2	Agua Dulce Cyn Rd. n/o Davenport Rd. <sup>2</sup>	LA	Sparse Residential	63.5	69.8	6.4
3	Agua Dulce Cyn Rd. n/o SR-14 <sup>2</sup>	LA	Open Space	83.9	85.6	6.7
4	Agua Dulce Cyn Rd. s/o SR-14 <sup>3</sup>	LA	Open Space	83.8	85.5	4.8
8	Ave Stanford s/o Vanderbilt	SC	Commercial	NA	NA	5.3
29	Chiquito Cyn (Long Cyn) n/o SR-126 <sup>2</sup>	LA	Open Space	NA	NA	11.0
41	Copper Hill Dr. e/o Haskell Cyn Rd.	SC/SOI	Residential	62.9	68.2	5.3
43	Agua Dulce Cyn Rd. s/o SR-14 <sup>3</sup>	LA	Commercial	55.8	59.7	4.0
53	Dockweiler Dr. w/o Sierra Hwy	SC	Sparse Residential	59.7	66.6	6.8
55	Franklin e/o Wolcott Way <sup>2</sup>	LA	Open Space	NA	NA	9.0
57	Golden Valley Rd. s/o Plum Cyn <sup>2</sup>	SC/SOI	Residential	61.7	75.1	7.8
68	Hasley Cyn Rd. w/o Del Valle Rd. <sup>2</sup>	LA	Open Space	59.2	65.6	6.4
72	Henry Mayo Dr e/o Commerce Center	LA	Residential	62.9	68.0	5.1
77	Lake Hughes Rd. e/o Castaic <sup>2</sup>	LA	Mixed	65.5	71.6	6.1
78	Lake Hughes Rd. e/o Ridge Route <sup>2</sup>	LA	Commercial	60.4	65.8	5.4
84	Lost Cyn Rd n/o Jakes Way	LA	Residential	0	71.3	NA
85	Lost Cyn Rd n/o Canyon Park	LA	Residential	0	68.5	NA
87	Lost Cyn Rd. s/o Via Princessa <sup>2</sup>	SC/LA	Residential	67.3	70.6	7.4
98	Magic Mtn Pkwy w/o The Old Road <sup>2</sup>	LA	Open Space	70.7	76.5	7.3
105	Magic Mtn Pkwy e/o Valencia	SC	Mixed	70.6	74.5	5.2
128	Newhall Ranch Rd. e/o Bouquet Cyn Rd.	SC	Mixed	65.8	74.1	8.3
143	Pico Cyn Rd. w/o Stevenson Rnch Pkwy <sup>2</sup>	LA	Residential	63.5	73.3	9.9
161	Ridge Route Rd. n/o Lake Hughes Rd. <sup>2</sup>	LA	Mixed	64.3	72.8	8.5

Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing Noise Level	OVOV Planning Area Buildout Noise Level	Cumulative Increase
162	Ridge Route n/o Castaic	LA	Commercial	64.3	66.4	2.0
172	San Martinez Grande Cyn n/o SR-126 <sup>2</sup>	LA	Open Space	NA	NA	7.0
238	The Old Road n/o Hillcrest Pkwy <sup>2</sup>	LA	Mixed	68.5	67.7	6.4
254	Ave. Tibbitts s/o Newhall Ranch Rd.	SC	Commercial	62.3	69.2	5.4
262	Valencia Pkwy w/o The Old Road <sup>2</sup>	LA	Residential	69.1	73.8	5.8
276	Via Princessa e/o Oak Ridge	SC	Residential	NA	NA	5.6
279	Via Princessa w/o Rainbow Glen Dr.	SC	Residential	NA	NA	10.8
280	Via Princessa e/o Rainbow Glen Dr.	SC	Residential	NA	NA	7.2
283	Via Princessa n/o Lost Cyn Rd. <sup>2</sup>	LA	Residential	66.6	68.7	7.0
290	Wiley Cyn Rd. e/o Orchard Village Rd.	SC	Residential	67.1	71.0	5.7
293	Wiley Cyn Rd s/o Lyons Ave	SC	Residential	61.2	69.7	5.4
294	Wiley Cyn Rd n/o Calgrove	SC	Residential	62.3	67.2	4.3
295	Wolcott Way n/o SR-126 <sup>2</sup>	LA	Open Space	NA	NA	7.8

Source: Mestres-Greve Associates, March 2009.

NA – existing traffic volumes were not available.

n/o = north of; s/o = south of; e/o = east of; w/o = west of

<sup>1</sup> Land uses as observed from aerials and during land use surveys.

<sup>2</sup> These roadway segments are within unincorporated Los Angeles County; the remaining segments are within the City of Santa Clarita.

**Table 3.18-7, Sound Level Comparison: Existing Area Plan and General Plan vs. OVOV Buildout Conditions**, compares future noise levels along the 29 roadway segments in the OVOV Planning Area. Compared to the existing General Plan and Area Plan, noise levels under the proposed General Plan and Area Plan would be less along eight roadway segments, greater along 12 segments, and unchanged along the remaining segments. The net increase or decrease in noise levels would be less than 3 dB and not perceptible to the human ear.

#### **Future Rail Noise Along Existing Rail Lines**

The Multi-County Goods Movement Action Plan prepared for Los Angeles County in April, 2008, and the draft 2008 Long Range Transportation Plan (LRTP) contain the most recent available data on existing and future planned rail operations in the Santa Clarita Valley.

Both Metrolink and freight trains utilize the railroad line. In future years both the operations of freight and Metrolink are expected to increase. According to the Multi-County Goods Movement Action Plan, the number of freight trains expected to use the Southern Pacific rail line from Los Angeles through the Santa Clarita Valley by 2025 ranges from 27 to 49 trains per day. The LRTP that shows proposed rail facilities and increased operations throughout its service area, including adding reverse commute service on the Antelope Valley line, expanding capacity on existing trains, and adding four Metrolink trains from Santa Clarita to Los Angeles.

Based on data from both of these documents, a moderate increase in the CNEL noise level of 2.4 dB is projected to occur by 2030. The noise increase was derived using the Wyle train noise model and imputing existing and future rail operations. Noise calculations are provided in the Mestre Greve report in **Appendix 3.18**. Existing and projected train noise contours shown on **Figure 3.18-8; Figure 3.18-10, Existing General Plan Projected Noise Contours; and Figure 3.18-11, OVOV Planning Area Noise Contours**. The projected level of rail noise increase would occur under either the existing Area Plan/General Plan or the proposed Area Plan/General Plan, and it is not considered to be a substantial noise increase that would adversely affect community noise levels.

**Table 3.18-7**  
**Sound Level Comparison: Existing Area Plan and General Plan vs. OVOV Buildout Conditions**

Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing General Plan and Area Plan Buildout Noise Level	OVOV Planning Area Buildout Noise Level	Project Contribution
2	Agua Dulce Cyn Rd n/o Davenport Rd <sup>2</sup>	LA	Sparse Residential	69.8	69.8	0.0
3	Agua Dulce Cyn Rd n/o SR-14 <sup>2</sup>	LA	Open Space	86.7	85.6	0.0
4	Agua Dulce Cyn Rd. s/o SR-14 <sup>3</sup>	LA	Open Space	86.6	85.5	1.8
8	Ave Stanford s/o Vanderbilt	SC	Commercial	NA	NA	0.8
29	Chiquito Cyn (Long Cyn) n/o SR-126 <sup>2</sup>	LA	Open Space	NA	NA	-0.3
41	Copper Hill Dr. e/o Haskell Cyn Rd	SC/SOI	Residential	68.5	68.2	-0.2
43	Agua Dulce Cyn Rd. s/o SR-14 <sup>3</sup>	LA	Commercial	58.8	59.7	1.0
53	Dockweiler Dr. w/o Sierra Hwy	SC	Sparse Residential	66.7	66.6	-0.2
55	Franklin e/o Wolcott Way <sup>2</sup>	LA	Open Space	NA	NA	0.0
57	Golden Valley Rd s/o Plum Cyn <sup>2</sup>	SC/SOI	Residential	75.1	75.1	0.0
68	Hasley Cyn Rd w/o Del Valle Rd <sup>2</sup>	LA	Open Space	68.2	68.0	0.7
72	Henry Mayo Dr e/o Commerce Center	LA	Residential	72.3	71.6	-0.3
77	Lake Hughes Rd e/o Castaic <sup>2</sup>	LA	Mixed	68.1	65.8	-0.7
78	Lake Hughes Rd e/o Ridge Route <sup>2</sup>	LA	Commercial	70.2	71.3	-2.3
84	Lost Cyn Rd n/o Jakes Way	LA	Residential	68.5	68.5	1.1
85	Lost Cyn Rd n/o Canyon Park	LA	Residential	70.4	70.6	1.1
87	Lost Cyn Rd s/o Via Princessa <sup>2</sup>	SC/LA	Residential	74.6	76.5	-0.4
98	Magic Mtn Pkwy w/o The Old Road <sup>2</sup>	LA	Open Space	74.2	74.5	0.1
105	Magic Mtn Pkwy e/o Valencia	SC	Mixed	73.3	73.3	0.1
128	Newhall Ranch Rd e/o Bouquet Cyn Rd	SC	Mixed	72.9	72.8	0.3

Segment No.	Roadway Link	City/SOI/ County/	Existing Land Use <sup>1</sup>	Existing General	OVOV	Project Contribution
				Plan and Area Plan Buildout Noise Level	Planning Area Buildout Noise Level	
143	Pico Cyn Rd w/o Stevenson Rnch Pkwy <sup>2</sup>	LA	Residential	63.4	66.4	0.0
161	Ridge Route Rd n/o Lake Hughes Rd <sup>2</sup>	LA	Mixed	69.8	NA	-0.1
162	Ridge Route n/o Castaic	LA	Commercial	86.7	67.7	3.0
172	San Martinez Grande Cyn n/o SR-126 <sup>2</sup>	LA	Open Space	NA	69.8	-1.5
238	The Old Road n/o Hillcrest Pkwy <sup>2</sup>	LA	Mixed	71.1	85.6	-0.3
254	Ave. Tibbitts s/o Newhall Ranch Rd	SC	Commercial	68.1	69.2	-0.4
262	Valencia Pkwy w/o The Old Road <sup>2</sup>	LA	Residential	73.7	73.8	0.1
276	Via Princessa e/o Oak Ridge	SC	Residential	NA	NA	-0.1
279	Via Princessa w/o Rainbow Glen Dr.	SC	Residential	NA	NA	0.2
280	Via Princessa e/o Rainbow Glen Dr.	SC	Residential	NA	NA	0.0
283	Via Princessa n/o Lost Cyn Rd <sup>2</sup>	LA	Residential	69.2	68.7	0.4
290	Wiley Cyn Rd e/o Orchard Village Rd	SC	Residential	70.5	71.0	0.3
293	Wiley Cyn Rd s/o Lyons Ave	SC	Residential	65.1	69.7	1.5
294	Wiley Cyn Rd n/o Calgrove	SC	Residential	67.2	67.2	1.0
295	Wolcott Way n/o SR-126 <sup>2</sup>	LA	Open Space	NA	NA	0.0

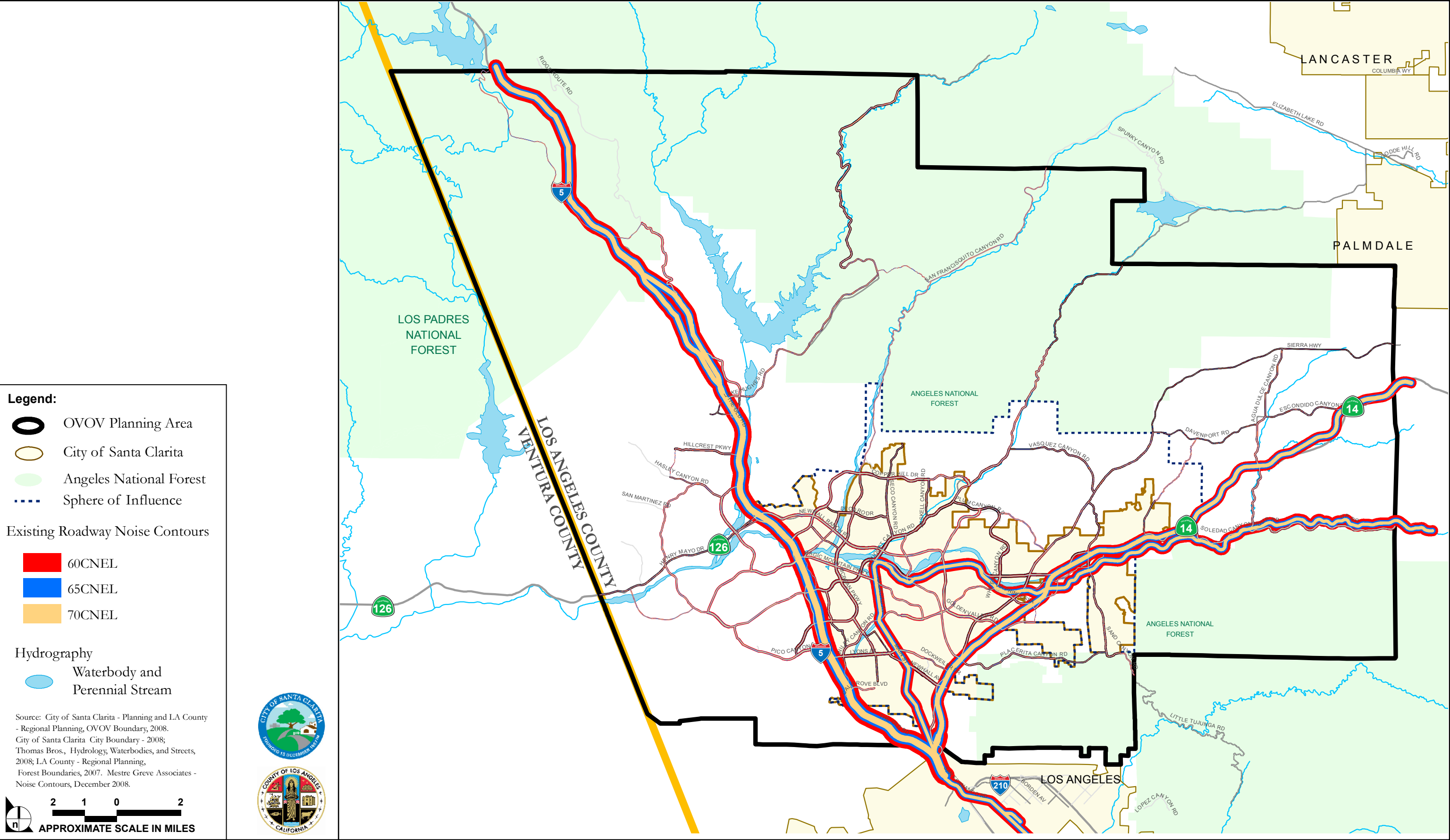
Source: Mestre-Greve Associates, March 2009.

NA – existing traffic volumes were not available.

n/o = north of; s/o = south of e/o = east of; w/o = west of

<sup>1</sup> Land uses as observed from aerials and during land use surveys.

<sup>2</sup> These roadway segments are within unincorporated Los Angeles County; the remaining segments are within the City of Santa Clarita.



SOURCE: City of Santa Clarita General Plan Update Noise Element - 2009

FIGURE **3.18-10**

Existing General Plan Projected Noise Contours





### Noise Impacts Along Potential Future Rail Lines

A high-speed rail line is being planned by the California High-Speed Rail Authority to connect northern and southern California. The anticipated route of this railway would run from Sacramento to Los Angeles, and would likely traverse the Santa Clarita Valley in the area of the Antelope Valley Freeway (SR-14) corridor. As the planning for this project proceeds, a separate EIR would be required to evaluate potential impacts of the proposed high-speed rail line, including noise impacts. At the time of this writing, the precise route of the future high-speed rail line through the OVOV Planning Area is not known, and the type of train and corresponding noise levels have not been determined. Therefore, no substantive planning in regard to future noise impacts from high-speed rail can be addressed in this impact analysis. Nonetheless, there is potential for significant noise and vibration impacts with operations of a high-speed rail system through the Valley.

### Noise Impacts Associated with High Density Development Along Railroad Lines

As part of the OVOV strategy to encourage Transit-Oriented Development (TOD) in the Santa Clarita Valley, higher density residential housing, and mixed-use commercial districts that may contain residential uses, are planned in proximity to portions of the railroad currently used for freight and Metrolink passenger service. As previously noted, a moderate increase in the CNEL noise level of 2.4 dB is projected to occur along rail lines at buildout. This increase is not considered substantial and it would not adversely affect community noise levels.

Although the 24-hour CNEL noise scale is the best scale to use for environmental noise, it is not suited to calculate the annoyance and activity disruption of single event noises, such as a train pass-by. No applicable threshold of significance exists for the impact of these single event noises. While living close to a rail station in a mixed-use development may provide conveniences and be desirable for some, noise and vibration from intermittent rail pass-bys may be considered a nuisance by other residents who could be adversely affected.

### Airport Noise Sources

The Agua Dulce Airport is located in the sparsely populated, unincorporated northeastern quadrant of the County's Planning Area. It is privately owned but is open to the public. The airport has a single 4,600 foot-long runway and serves general aviation aircraft only. A 65 CNEL noise contour has been generated for the airport by the County of Los Angeles (see **Figure 3.18-12, Agua Dulce Airport 65 dB CNEL Contour**). As shown, the noise contour barely extends past the ends of the runway and does not impact any existing residences.

Flight operations are not permitted at night. Furthermore, aircraft are not allowed to fly within 1,000 feet of a school located 1 mile southwest of the airport, and aircraft departing to the north on Runway 4 are to avoid flying over the homes 2,000 feet northeast of the end of the runway. Finally, touch and go practices are not permitted. All of these restrictions have a beneficial noise impact on the surrounding environment. The Agua Dulce Airport does not have a master plan; rather, the Los Angeles County Airport Land Use Plan (1991) covers all public airports in the County, with the exception of Fox Airfield. Under the adopted Airport Land Use Plan, no residences are permitted outside the 60 db(A) CNEL contour without ensuring that interior noise levels of 45 dB(A) CNEL or less can be achieved.<sup>14</sup>

**Policies N 3.1.1** and **N 3.1.5** would ensure acceptable interior noise levels in residences, schools, childcare centers, senior housing, and other noise sensitive uses.

**Policies C 2.3.3, C 2.4.2, LU 3.3.1, LU 4.1.3, LU 7.7.1, CO 2.3.3, CO 9.1.11, N 1.1.1, N 1.1.2, N 1.1.3, N 1.1.4, N 1.1.6, N 3.1.1, N 3.1.2, N 3.1.3, N 3.1.6, N 3.1.7, N 3.1.8, N 3.1.9, N 4.1.1, N 4.1.2, and N 4.1.3** would ensure land use compatibility so that noise sensitive receptors are not adversely affected by stationary and mobile source noise, and that business centers, rather than noise sensitive uses, are placed along major transportation corridors.

**Policies C 1.3.6, C 2.2.6, N 2.1.1 to N 2.1.7** would reduce traffic noise by supporting alternative forms of transportation, promoting walkable neighborhoods and business districts, reducing the number of cars on roadways, and constructing sound barriers. **Policy C 1.3.5** would ensure that new development would not be adversely affected by airport noise. **Policy C 3.1.8** would minimize noise impacts for increases in rail service in the Valley. **Policies N 3.1.1** and **N 3.1.5** would ensure acceptable interior noise levels in residences, schools, childcare centers, senior housing, and other noise sensitive uses.

#### *Proposed Area Plan Policies*

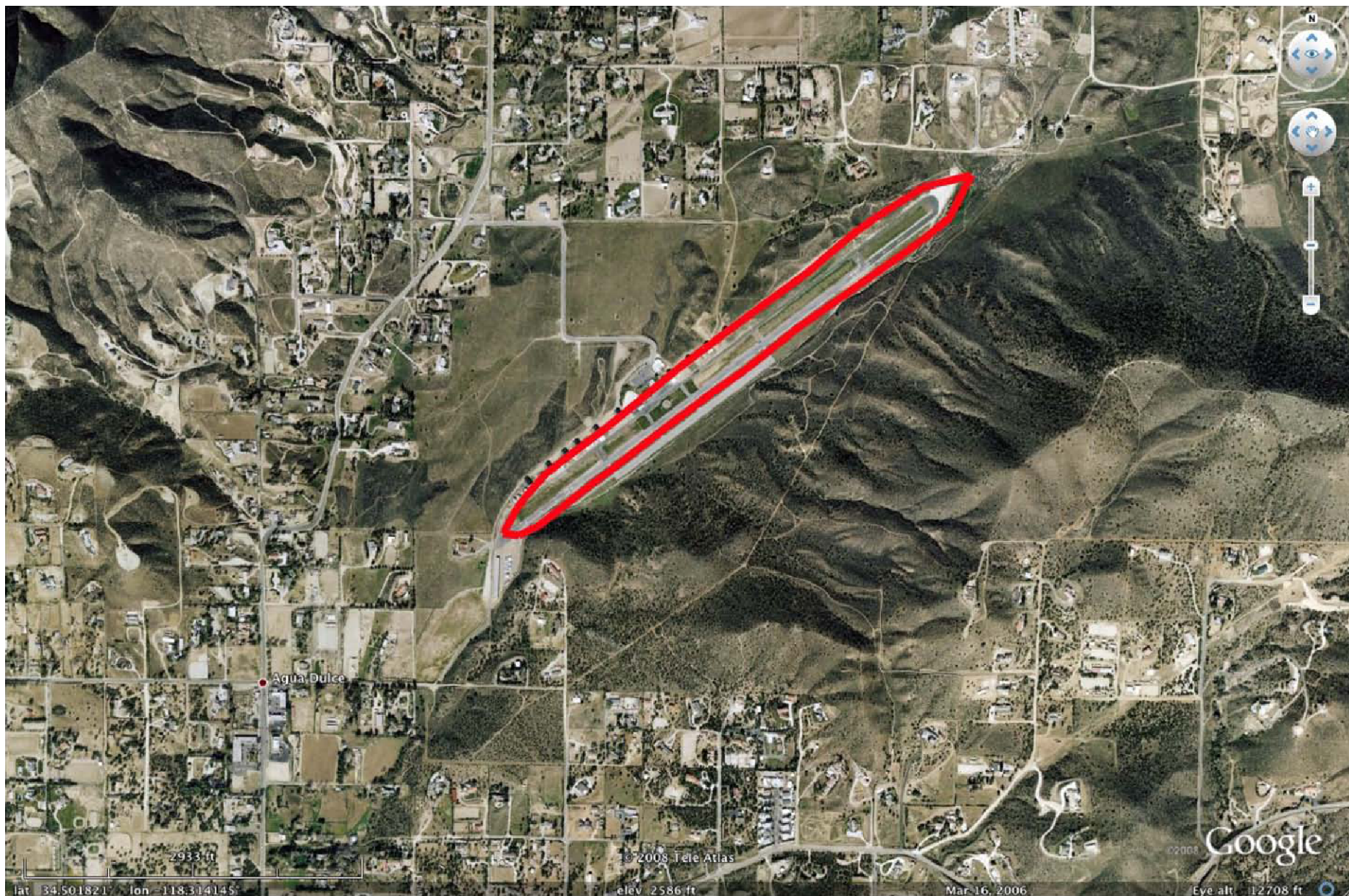
**Policy LU 2.3.3:** Manufacturing, processing of goods and materials, and warehousing should not be allowable uses in a mixed use development, although some light manufacturing and warehousing may be appropriate in second story units.

**Policy LU 3.3.1:** Identify areas subject to hazards from seismic activity, unstable soils, excessive noise, unhealthful air quality, or flooding, and avoid designating residential uses in these areas unless adequately mitigated.

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<sup>14</sup> Los Angeles County Department of Regional Planning, *Los Angeles County Airport Land Use Plan*, (Los Angeles, California: Adopted December 19, 1991), pp. 12-13.





SOURCE: Mestre Greve Associates, One Valley One Vision Noise Element of the General Plan - February 2009

FIGURE 3.18-12

Agua Dulce Airport 65 dB CNEL Contour

- Policy LU 4.1.3:** Direct business creation and expansion for larger companies within and adjacent to existing and planned business centers and major transportation corridors.
- Policy LU 7.7.1:** Maintain a suitable distance and/or provide buffering to separate aggregate mining and processing activities from nearby residential uses and other uses with sensitive receptors to noise and airborne emissions.
- Policy C 1.3.5:** Ensure consistency with the County’s adopted Airport Land Use Plan as it pertains to the Agua Dulce Airport, in order to mitigate aviation-related hazards and protect airport operations from encroachment by incompatible uses.
- Policy C 1.3.6:** Support the expansion of Palmdale Regional Airport and the extension of multi-modal travel choices between the airport and the Santa Clarita Valley, in conformance with regional planning efforts.
- Policy C 2.2.6:** Within residential neighborhoods, promote the design of “healthy streets” which may include reduced pavement width, shorter block length, provision of on-street parking, traffic-calming devices, bike routes and pedestrian connectivity, landscaped parkways, and canopy street trees.
- Policy C 2.3.3:** When evaluating road widening projects, consider the impacts of additional traffic, noise, and fumes on adjacent land uses and use context-sensitive design techniques where appropriate.
- Policy C 2.4.2:** Establish adequate setbacks from major and secondary highways for sensitive receptors and sensitive uses, so as to minimize impacts on these individuals and uses from noise and air pollution caused by truck traffic.
- Policy C 4.1.8:** Minimize impacts to passenger rail service and the community from any proposed increase to freight rail service through the Valley.
- Policy CO 2.3.3:** Through the review process for any mining or mineral extraction proposal, ensure mitigation of impacts from mining and processing of materials on adjacent uses or on the community, including but not limited to air and water pollution, traffic and circulation, noise, and land use incompatibility.

- Policy CO 9.1.11:** Locate and design parks to address potential adverse impacts on adjacent development from noise, lights, flying balls, traffic, special events, and other operational activities and uses.
- Policy N 1.1.5:** Monitor and update data and information regarding current and projected noise levels in the planning area.
- Policy N 2.1.1:** Encourage owners of existing noise-sensitive uses, and require owners of proposed noise sensitive land uses, to construct sound barriers to protect users from significant noise levels, where feasible and appropriate.
- Policy N 2.1.3:** Where appropriate, coordinate with the California Department of Transportation (Caltrans) to ensure that sound walls or other noise barriers are constructed along Interstate 5 and State Route 14 in the immediate vicinity of residential and other noise sensitive developments, where setbacks and other sound alleviation devices do not exist.
- Policy N 2.1.4:** Reduce significant noise levels related to through-traffic in residential areas by promoting subdivision circulation designs to contain a hierarchy of streets that efficiently direct traffic to highways.
- Policy N 2.1.5:** Encourage employers to develop van pool and other travel demand management programs to reduce vehicle trip-generated noise in the planning area.
- Policy N 2.1.6:** Work with City of Santa Clarita Transit to improve and expand current public transit services and routes to reduce vehicle trips and resulting noise levels.
- Policy N 2.1.7:** Require vehicle owners to properly maintain their equipment to avoid generating excessive noise levels.
- Policy N 3.1.1:** Require that developers of new single-family and multi-family residential neighborhoods in areas where the ambient noise levels exceed 60 CNEL provide mitigation measures for the new residences to reduce interior noise levels to 45 CNEL, based on future traffic and railroad noise levels.
- Policy N 3.1.2:** Require that developers of new single-family and multi-family residential neighborhoods in areas where the projected noise levels exceed 65 CNEL provide mitigation measures (which may include noise barriers, setbacks, and site



design) for new residences to reduce outdoor noise levels to 65 CNEL, based on future traffic conditions. This requirement would apply to rear yard areas for single-family developments, and to private open space and common recreational and open space areas for multi-family developments.

**Policy N 3.1.5:** Require that developers of private schools, childcare centers, senior housing, and other noise sensitive uses in areas where the ambient noise level exceeds 65 dBA (day), provide mitigation measures for these uses to reduce interior noise to acceptable levels.

**Policy N 3.1.6:** Ensure that new residential buildings shall not be located within 150 feet of the centerline for Interstate 5.

**Policy N 3.1.7:** Ensure that design of parks, recreational facilities, and schools minimize noise impacts to residential neighborhoods.

**Policy N 3.1.8:** As a condition of issuing permits for special events, require event promoters to mitigate noise impacts to adjacent sensitive uses through limiting hours of operation and other means as appropriate, which may include notification to affected residents.

**Policy N 3.1.9:** Implement a buyer and renter notification program for new residential developments where appropriate, to educate and inform potential buyers and renters of the sources of noise in the area and/or new sources of noise that may occur in the future. As determined by the reviewing authority, notification may be appropriate in the following areas:

- a. Within one mile of Six Flags Magic Mountain theme park, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time.
- b. Within 1,000 feet of the railroad, potential buyers and renters should receive notice that noise may occasionally be generated from this facility and that the frequency and loudness of noise events may change over time.
- c. Within 200 feet of commercial uses in mixed-use developments, potential buyers and renters should receive notice that the commercial uses within the mixed-use developments may generate noise in excess of levels typically found in residential areas, that the commercial uses may change over time,

and the associated noise levels and frequency of noise events may change along with the use.

- d. Within 1,000 feet of the Saugus Speedway, in the event speedway operations are resumed in the future.

**Policy N 4.1.1:** Implement and enforce the applicable Noise Ordinance to control noise from commercial and industrial sources that may adversely impact adjacent residential neighborhoods and other sensitive uses.

**Policy N 4.1.2:** Require appropriate noise buffering between commercial or industrial uses and residential neighborhoods and other sensitive uses.

**Policy N 4.1.3:** Adopt and enforce standards for the control of noise from commercial and entertainment establishments when adjacent to residential neighborhoods and other sensitive uses.

#### *Effectiveness of Proposed Area Plan Policies*

The proposed policies would ensure land use compatibility so that noise sensitive receptors are not adversely affected by noise, and that business centers, rather than noise sensitive uses, are placed along major transportation corridors. The proposed policies would reduce traffic noise by supporting alternative forms of transportation, promoting walkable neighborhoods and business districts, reducing the number of cars on roadways, and constructing sound barriers. The policies would ensure that new development would not be adversely affected by airport noise and would minimize noise impacts for increases in rail service in the Valley. The policies would ensure acceptable interior noise levels in residences, schools, childcare centers, senior housing, and other noise sensitive uses. However, implementation of these policies would not reduce potential construction and operational Area Plan noise impacts under this criterion to less than significant.

#### **Plan to Plan Analysis**

**Table 3.18-7, Sound Level Comparison: Existing General Plan and Area Plan vs. OVOV Buildout Conditions**, compares future noise levels along the 29 roadway segments in the OVOV Planning Area. Compared to the existing General Plan and Area Plan, noise levels under the proposed General Plan and Area Plan would be less along eight roadway segments, greater along 12 segments, and unchanged along the remaining segments. As described in **Section 3.2, Transportation and Circulation**, buildout of the existing Area Plan would potentially increase the number of trip ends. The existing (2004) number of trip

ends was found to be 1,487,994 vehicle trips for the OVOV Planning Area. With buildout under the existing Plan, the amount of trip ends would total 3,207,093 for the OVOV Planning Area. The proposed OVOV buildout would generate 3,288,386 trip ends, an overall increase of 3 percent (increase for proposed Area Plan is due to an increase in total commercial square feet). Therefore, the existing Plan's impacts on noise would be less than those of the proposed Area Plan.

## MITIGATION FRAMEWORK

Implementation of the following mitigation measure would not reduce noise and vibration from pile driving to less than significant but would help to reduce the impact.

**MM 3.18-1** To reduce construction vibration impacts, to the extent feasible, cast-in-drilled-hole piles shall be used in lieu of pile driving.

Pile drilling is an alternate method of pile installation where a hole is drilled into the ground up to the required elevations and concrete is then cast into it. The estimated noise level of pile drilling at 50 feet is 80 to 95 dB(A)  $L_{eq}$  compared to 90 to 105 dB(A)  $L_{eq}$  of conventional pile driving.<sup>15</sup> Therefore, pile drilling generally produces noise levels approximately 10 to 15 dB lower than pile driving.

**MM 3.18-2** Maintain adequate buffer distances from nearby residences to freeways, high traffic volume roads, railroads, airports, mining centers and other existing processing plants where the public may be affected by noise and particle emissions.

**MM 3.18-3** The construction of residential developments should be limited to buildings with special filtration units or discouraged at distances of 1,500 feet or less from freeways, depending upon traffic volume.

**MM 3.18-4** Sound barriers should be required of the owners of the proposed sensitive land uses adjacent to high noise sources, to protect the public from significant noise impacts.

**MM 3.18-5** The California Department of Transportation should be contacted when residential projects, schools, hospitals, convalescent homes, and other sensitive land uses are to be built so that appropriate sound barriers or sound walls are constructed along Interstate 5 and State Route 14 regardless of setbacks or other sound attenuation.

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<sup>15</sup> US Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, December 1971.



- MM 3.18-6** The placement of telecommunication towers and antennas power boxes should comply with noise ordinances. All related equipment should be rated at 45 dB(A).
- MM 3.18-7** Consider engineering controls or better alternative fuels for the control of greenhouse gases, particle matter, carbon print, criteria air pollutants and non regulated emissions associated with the construction and operational phases of future projects.

### **SIGNIFICANCE OF IMPACT WITH MITIGATION FRAMEWORK**

It is not always possible to reduce construction noise impacts to below standards set forth in the County's Noise Ordinance; therefore, short-term construction noise impacts are unavoidably significant for the duration of the construction activities. Short-term noise and vibration impacts from the pile driving would be unavoidably significant for the duration of the pile driving.

## 3.19 POPULATION AND HOUSING

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### EXECUTIVE SUMMARY

This section summarizes the existing and projected population and housing supply in the County's Planning Area and analyzes the potential of the proposed Area Plan to induce population growth, displace existing housing, or displace existing populations. The County's Planning Area consists of unincorporated land outside the City's boundaries and adopted Sphere of Influence (SOI) but within the One Valley One Vision (OVOV) Planning Area boundaries. The City's Planning Area consists of its incorporated boundaries and adopted SOI. Together the County and City Planning Areas comprise the OVOV Planning Area.

Information on population, housing, and employment for the County's Planning Area was derived from the Southern California Association of Governments (SCAG). Buildout of the County's proposed Area Plan would increase the population and the number of housing units within the County's Planning Area. The population at Area Plan buildout would be consistent with SCAG's long-term growth forecasts for the County's Planning Area. Additionally, implementation of the proposed Area Plan would not result in the displacement of substantial numbers of housing or people since several proposed policies promote growth and development within underutilized and vacant areas of the County's Planning Area. For these reasons, implementation of the County's Area Plan on population and housing would be less than significant.

### EXISTING CONDITIONS

#### Population

A significant amount of the population growth in Los Angeles County over the past two decades has occurred in North Los Angeles County, which includes both the Santa Clarita Valley and the Antelope Valley (including the cities of Palmdale and Lancaster). Between 1990 and 2000, the Santa Clarita Valley grew by almost 60,000 residents (approximately 39 percent), reaching a population of 212,611 by 2000. Average household size increased from 2.93 to 3.09 persons per household over the census decade.<sup>1</sup> In 2008, the estimated population of the entire Santa Clarita Valley was 252,000 with 75,000 residing in unincorporated County areas and the remainder residing within the City of Santa Clarita.<sup>2</sup>

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<sup>1</sup> Draft Santa Clarita Valley Area Plan, Land Use Chapter (2008), 32.

<sup>2</sup> Draft Santa Clarita Valley Area Plan, Land Use Chapter (2008), 22.

## Housing

As of 2008, there were approximately 80,000 dwelling units within the Santa Clarita Valley, of which 23,000 were in the unincorporated areas and 57,000 were within the City of Santa Clarita. Another 39,500 dwelling units had received land use approval, including 33,500 units in unincorporated County areas and 6,000 units within the City of Santa Clarita; several thousand more dwelling units were the subject of pending land use applications.<sup>3</sup>

## Employment

The total number of jobs in the Santa Clarita Valley in 2005 was 124,200, of which 49,311 jobs (approximately 40 percent) were located in the unincorporated areas, primarily west of Interstate 5, and 74,889 jobs were located within the City of Santa Clarita.<sup>4</sup> From 1992 to 2005, approximately 40,000 new jobs were created in the Santa Clarita Valley. Between 2000 and 2005, job growth averaged about 3,900 jobs per year. Most of this job growth occurred in the manufacturing, services, retail trade, and construction sectors.<sup>5</sup>

## Jobs/Housing Balance

The jobs/housing balance compares the available housing and available jobs within a community. Achieving a jobs/housing balance can significantly reduce the total number of vehicle trips on the road network and provide greater quality of life for residents. Improving the jobs/housing balance requires planning for the location, intensity, and nature of jobs and housing in order to encourage a reduction in vehicle trips and miles traveled, and a corresponding increase in the use of mass transit and alternative transportation methods such as bicycles, carpools, and walking. Strategies include locating higher-density housing near employment centers, promoting infill development, promoting transit-oriented development, actively recruiting businesses that will utilize the local workforce, developing a robust telecommunications infrastructure (including broadband service to homes and businesses), developing workforce skills consistent with evolving local economies, and providing affordable housing opportunities within the community. Currently, over half of employed Santa Clarita Valley residents, including residents of the unincorporated areas, must travel out of the Valley to work. In 2000, the Valley had a jobs/housing ratio of 0.88, compared to the County-wide ratio of 1.43 jobs per

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<sup>3</sup> *Draft Santa Clarita Valley Area Plan*, Land Use Chapter (2008), 22.

<sup>4</sup> *Draft Santa Clarita Valley Area Plan*, Land Use Chapter (2008), 35.

<sup>5</sup> *Draft Santa Clarita Valley Area Plan*, Land Use Chapter (2008), 35.

household. However, due to the recent increase in the number of employment opportunities within the Valley, the jobs/housing ratio was estimated to range from 1.3 to 1.5 jobs per household in 2008.<sup>6</sup>

## Growth Projections

SCAG is a federally designated metropolitan planning organization for the Southern California region. The County's Planning Area is located within the six-county jurisdiction of SCAG, which includes Los Angeles, Ventura, Orange, Riverside, San Bernardino, and Imperial counties. One of SCAG's primary functions is to forecast population, housing, and employment growth for each region, subregion, and city. The latest forecast was completed as part of the 2008 Regional Transportation Plan (RTP) update, which was adopted in May 2008. The OVOV Planning Area is located in the North Los Angeles Subregion, which also encompasses other unincorporated Los Angeles County areas outside the Santa Clarita Valley as well as the cities of Santa Clarita, Lancaster, and Palmdale.

SCAG growth forecasts for the unincorporated portions of the North Los Angeles Subregion, which includes the County's Planning Area, are shown in **Table 3.19-1, SCAG's Growth Forecast for the Unincorporated North Los Angeles Subregion**. According to SCAG's Growth Forecast, the population of the entire unincorporated subregion is expected to grow from 132,797 residents in the year 2005 to 434,773 residents in the year 2035; the number of occupied housing units is expected to increase from 39,331 units in the year 2005 to 129,981 units in the year 2035; and employment in the unincorporated subregion is expected to increase from 34,592 jobs in the year 2005 to 85,289 jobs in the year 2035. This growth represents more than a doubling in population and housing, and a 150 percent increase in employment, over the 30-year period.

**Table 3.19-1**  
**SCAG's Growth Forecast for Unincorporated North Los Angeles Subregion**

	2005	2010	2015	2020	2025	2030	2035
Population	132,797	194,704	244,463	294,120	342,578	389,595	434,773
Households	39,331	58,090	74,714	92,232	105,907	119,114	129,981
Employment	34,592	46,820	56,539	62,745	70,041	77,831	85,289
Source: Southern California Association of Governments, 2004 Regional Transportation Plan/Growth Vision: Socio-Economic Forecast Report, June 2008.							

<sup>6</sup> Draft Santa Clarita Valley Area Plan, Land Use Chapter (2008), 36.

## REGULATORY FRAMEWORK

### SCAG Regional Housing Needs Assessment

California law requires regional Councils of Governments (COGs) throughout the state to periodically make projections of anticipated growth in employment and population within their member counties. Based on these projections, the COGs calculate a fair share of the need for new housing in each jurisdiction within their member counties. This process is known as the Regional Housing Needs Assessment (RHNA). Each city or county in a COG planning region must ensure that its Housing Element is consistent with the RHNA prepared by that COG, and must identify sufficient, appropriately zoned land in the land use element of the General Plan and its components, including Area and Community Plans, to accommodate the housing growth estimated by the RHNA.

The unincorporated portion of the Santa Clarita Valley is located within the SCAG planning area, which includes the counties of Ventura, Los Angeles, San Bernardino, Riverside, Orange, and Imperial. In 2007, SCAG calculated the RHNA for its six-county region for the period 2006 to 2014. SCAG has estimated the number of new units for very low, low, moderate and above moderate-income households needed in unincorporated Los Angeles County to meet its fair share of the region's housing needs. These numbers are presented in **Table 3.19-2, Regional Housing Needs Assessment**. Between 2006 and 2008, 3,613 new units were constructed within the unincorporated County areas; in addition, 2,265 housing units have been approved throughout the unincorporated County areas.<sup>7</sup> Based on the development of these 5,878 total housing units, the development of at least 51,298 additional dwelling units within the County is required to meet the remainder of its RHNA allocation.

**Table 3.19-2**  
**Regional Housing Needs Assessment**

Income Level	Number of Units	Percent of Total
Very Low (50% or less of median)	14,425	25.2%
Low (51% to 80% of median)	9,073	15.9%
Moderate (80% to 120% of median)	9,816	17.2%
Above Moderate (>120% of median)	23,862	41.7%
<b>Total</b>	<b>57,176</b>	<b>100%</b>
<i>Source: Los Angeles County Housing Element (August 2008), 2-24.</i>		

<sup>7</sup> Los Angeles County Housing Element (August 2008), 2-24.

State law (Government Code 65915) requires jurisdictions to grant incentives to promote affordable housing development, provided that a minimum number of affordable units are constructed and remain affordable for specified periods of time. In addition, state law requires that jurisdictions provide density bonuses for affordable housing production, up to a maximum of 35 percent over the units allowed by the Area Plan Land Use Map. In exchange for the additional units, the housing developer ensures that a certain percentage of the units will be priced at affordable levels and will remain affordable over the time period required by the law. Los Angeles County complies with state requirements and provides additional incentives to promote affordable housing construction including fee waivers, reduced setbacks, increased height limits, and additional density increases.

## THRESHOLDS OF SIGNIFICANCE

In order to assist in determining whether a project will have a significant effect on the environment, the *State CEQA Guidelines*, Appendix G identify criteria for conditions that may be deemed to constitute a substantial or potentially substantial adverse change in physical conditions.

Potentially significant impacts on population and housing would occur if the proposed Area Plan would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

## IMPACT ANALYSIS

This impact analysis section evaluates the potential effects of the proposed Area Plan policies on health and social services within the County's Planning Area using the *State CEQA Guidelines* threshold of significance.

**Impact 3.19-1                      Implementation of the proposed Area Plan would result in a potentially significant impact to population growth in the County's Planning Area.**

In 2008, the population of the County's Planning Area was approximately 75,000 residents. Buildout of the proposed Area Plan Land Use Map would increase the County Planning Area's population by 162,387 residents to a total population of approximately 237,387 residents. This population projection

assumes buildout of the maximum number of dwelling units per acre for each residential land use category designated on the proposed Land Use Map (see **Figure 3.1-2, Proposed Land Use Policy Map**). For purposes of the following analysis, buildout of the Area Plan Land Use Map is conservatively assumed to occur by year 2035.

SCAG projects that the population of the unincorporated North Los Angeles County subregion, which includes unincorporated portions of the Santa Clarita Valley as well as unincorporated areas of the Antelope Valley, will increase from 132,797 residents in year 2005 to 434,773 residents in year 2035, for a total increase of 301,975 residents (no population projections from SCAG are presently available for this region after year 2035). Accordingly, SCAG projects substantial population growth (over 227 percent) throughout unincorporated North Los Angeles County during the current planning period. Since buildout of the proposed Area Plan would increase the population of the unincorporated Santa Clarita Valley by 162,387 residents by year 2035, and given that the population of the entire unincorporated North Los Angeles subregion is projected to increase by 301,976 residents by 2035, implementation of the proposed Area Plan would account for approximately 54 percent of this growth. The remaining 46 percent of growth within the unincorporated North Los Angeles subregion between years 2005 and 2035 would primarily occur within the Antelope Valley. Therefore, population growth in the unincorporated Santa Clarita Valley due to buildout of the proposed Area Plan is consistent with overall growth anticipated by SCAG for the unincorporated North Los Angeles County subregion.

Implementation of the proposed Area Plan would indirectly induce population growth if it proposes or otherwise facilitates the extension of roads and other infrastructure beyond the boundaries of the County's Planning Area. However, the policies of the proposed Area Plan consistently promote urban infill and discourage the introduction of new uses on remote and undeveloped land. In fact, **Policy CO 3.1.1** explicitly states that the Land Use Map and the development review process shall concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss. Additionally, the proposed Area Plan promotes incentives for infill development and rebuilding to limit impacts on open space and other natural, undeveloped areas (**Policy CO 1.5.5**). While these policies are intended to protect natural resources, they also limit the indirect inducement of future growth.

### ***Proposed Area Plan Policies***

- Policy CO 1.5.5:** Promote concentration of urban uses within the center of the Santa Clarita Valley through incentives for infill development and rebuilding, in order to limit impacts to open space, habitats, watersheds, hillsides, and other components of the Valley's natural ecosystems.
- Policy CO 3.1.1:** On the Land Use Map and through the development review process, concentrate development into previously developed or urban areas to promote infill development and prevent sprawl and habitat loss, to the extent feasible.

### ***Effectiveness of Proposed Area Plan Policies***

None of the Area Plan policies regulate population growth. However, based on buildout of the proposed Land Use Map, the future population of the County's Planning Area would be consistent with SCAG's long-term growth forecasts. Furthermore, several policies limit the potential for urban sprawl, thereby limiting the potential for unforeseen substantial indirect growth impacts due to the extension of roads and other infrastructure into undeveloped areas. As a result, impacts related to direct and indirect population growth would be less than significant.

### **Plan to Plan Comparison**

Population within the County's Planning Area would be 270,000 at buildout of the current Area Plan, representing an increase of 195,000. This population increase would account for 65 percent of SCAG's projected population growth within the unincorporated North Los Angeles County subregion. Population within the County's Planning Area would be 237,387 at buildout of the proposed Area Plan, representing an increase of 162,387. This population increase would account for 54 percent of SCAG's projected population growth within the unincorporated North Los Angeles County subregion. Therefore, population growth in the unincorporated Santa Clarita Valley at buildout of the existing Area Plan and the proposed Area Plan are both consistent with the overall growth anticipated by SCAG for the unincorporated North Los Angeles County subregion.



**Impact 3.19-2                    Implementation of the proposed Area Plan would result in a potentially significant impact to displacement of substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.**

This impact discussion is presented using two subsections that include an analysis of impacts that could potentially occur from buildout of the proposed Area Plan as well as an analysis of the policies for the County's Housing Programs as presented in the adopted Countywide General Plan Housing Element. Proposed Area Plan policies and adopted Countywide General Plan Housing Element policies are presented at the end of each subsection. A discussion of the effectiveness of the policies for these two subsections follows the impact discussions and the presentation of policies for each of the subsections.

### ***Buildout of the Proposed Area Plan Land Use Map***

Buildout of the proposed Area Plan would increase the acreage of residential, commercial, and industrial land uses in the County's Planning Area. The proposed Land Use Map illustrates the locations of these uses by their corresponding land use designations. A significant impact would occur if the proposed Area Plan would allow the development of non-residential uses on sites currently developed with housing through a land use designation or zone change, or if it would implement a change in the allowable development density (i.e., the number of units per acre) for an existing residential area. Such actions could result in the displacement of existing housing and increase the demand for replacement housing elsewhere.

In order to reduce these potential impacts, several policies in the proposed Area Plan related to development and growth patterns would promote the preservation of existing housing. No policies explicitly prohibit the removal of existing housing units, but several indirectly address this potential impact. The proposed Area Plan promotes the construction of new uses on presently vacant and underutilized land within the urbanized portions of the Planning Area (**Policy LU 1.1.2** and **Policy LU 1.1.5**), rather than on sites currently developed with occupied housing units. Other policies specifically discourage urban sprawl into rural areas and the low-density, outlying areas of the Santa Clarita Valley, thereby reducing the potential displacement of existing housing in less developed regions (**Policy LU 1.1.3** and **Policy LU 1.1.6**).

The proposed Area Plan encourages growth through the development of mixed-use communities, which would be accomplished through the revitalization of commercial corridors rather than modification to established neighborhoods. The potential displacement of existing housing is also addressed by **Policy**

LU 2.1.1, which requires that new or reconfigured land uses be sited in a manner that is sensitive to a community's valued assets (such as housing) and ensures land use compatibility.

Another goal of the proposed Area Plan is to conserve and improve the existing housing stock through the assistance of various County-sponsored programs. Policies include providing graffiti and debris removal services, maintaining adequate infrastructure and community facilities, and enforcing property maintenance (**Policies 5.1 through 5.3** of the adopted Countywide General Plan Housing Element). Additionally, policies include investing public and private resources in the maintenance and rehabilitation of existing housing to prevent or reverse neighborhood deterioration, and allocating federal and state resources toward the preservation of residential units (**Policies 6.1 and 6.2** of the adopted Countywide General Plan Housing Element). By promoting the rehabilitation of units in substandard conditions, the proposed Area Plan encourages the maintenance of the existing housing stock and continued occupancy by residents. Furthermore, buildout of the proposed Area Plan would increase the total number of housing units within the County's Planning Area, thereby expanding the housing supply. The County must provide adequate sites for the development of at least 51,298 new housing units to fulfill the RHNA housing allocation.

### **Proposed Area Plan Policies**

#### *Land Use Element Policies*

- Policy LU 1.1.2:** On the Land Use Map, concentrate urban development within flatter portions of the Santa Clarita Valley floor in areas with limited environmental constraints and served with infrastructure.
- Policy LU 1.1.3:** Discourage urban sprawl into rural areas by limiting non-contiguous, "leap-frog" development outside of areas designated for urban use.
- Policy LU 1.1.5:** Increase infill development and re-use of underutilized sites within and adjacent to developed urban areas to achieve maximum benefit from existing infrastructure and minimize loss of open space, through redesignation of vacant sites for higher density and mixed use, where appropriate.
- Policy LU 1.1.6:** Preserve the rural lifestyle in canyons and low-density, outlying areas of the Santa Clarita Valley, through designating these areas as Rural Land on the Land Use Map where appropriate.

**Policy LU 2.1.1:** On the Land Use Map, designate a balance of land uses in appropriate amounts to meet future community needs while ensuring that no use designation is over-represented in a manner that is not economically viable.

*Adopted Countywide General Plan Housing Element Policies*

**Policy 5.1:** Support neighborhood preservation programs, such as graffiti abatement, abandoned or inoperative automobile removal, tree planting, and trash and debris removal.

**Policy 5.2:** Maintain adequate neighborhood infrastructure, sound community facilities, and services as a means of sustaining the overall livability of neighborhoods.

**Policy 5.3:** Enforce health, safety, building, and zoning laws directed at property maintenance as an ongoing function of the County government.

**Policy 6.1:** Invest public and private resources in the maintenance and rehabilitation of existing housing to prevent or reverse neighborhood deterioration.

**Policy 6.2:** Allocate Federal and State resources toward the preservation of residential units, particularly those that are affordable to extremely low-, very low-, and lower-income households.

*Housing Programs*

As shown above, implementation of the proposed Area Plan would not result in the displacement of existing housing. In fact, the adopted Countywide General Plan Housing Element establishes five generalized goals, each supported by policies and programs, for the provision of adequate housing to accommodate the existing and future populations of the County's Planning Area. These goals are:

- Housing availability
- Housing affordability
- Neighborhood and housing preservation
- Equal housing opportunity
- Monitoring and implementation of housing programs

Unlike the other elements, state law requires that the Housing Element must contain quantified objectives for meeting its share of the regional housing needs, and specific programs designed to meet the County's housing goals. During the next Housing Element update process in 2014, the programs established in this element will be evaluated to determine the County's level of success in meeting its objectives. The following is a list of the County's housing goals and associated supporting programs that will be used to implement housing goals.

### **Housing Availability**

- **Program 1:** Adequate Sites for Regional Housing Needs Allocation. Under this program, the County will maintain an inventory of sites with zoning and development standards, and with adequate public infrastructure and services, to meet the County's RHNA allocation of 57,176 units.
- **Program 2:** Removal of Governmental Constraints. Under this program, the County will amend the Zoning Code to include a reasonable accommodations policy, remove mobile home permit provisions, and create standards for single room occupancy housing, among others.
- **Program 3:** Affordable Housing Density Bonus Program. This program provides incentives for affordable housing by permitting density increases beyond what is allowed by the County of Los Angeles General Plan and Santa Clarita Valley Area Plan.
- **Program 4:** Infill Sites Utilization Program. This program promotes the acquisition, sale, or lease of infill sites of no more than four units each to increase affordable housing opportunities.
- **Program 5:** Graduated Density Zoning. This program offers increased density based on the size of a development site, thereby encouraging owners of adjoining properties to collaborate in development or to package parcels for sale.
- **Program 6:** Transit Oriented Districts. This program promotes and encourages transit oriented development along major transportation corridors.
- **Program 7:** Land Banking/Write-Downs. Under this program, the County can acquire and facilitate the acquisition of properties as they become available and offer the properties to qualified developers during its Request for Proposal/Notice of Funding Availability process.
- **Program 8:** Second Unit Ordinance. This program permits second units in residential and agricultural zones.
- **Program 9:** Community Land Trust. Under this program, the County would maintain a property trust that aims to benefit the surrounding community by ensuring the long-term availability of affordable housing.
- **Program 10:** Inclusionary Housing Program. This program would require a developer to make a certain percentage of units in a development affordable to low- and moderate-income households.

- **Program 11:** Commercial Linkage Fee for Housing. This program would establish a reasonable share of the affordable housing impacts to commercial development.
- **Program 12:** Small Lot Subdivisions. This program would facilitate the creation of smaller, fee-simple lots without the need to establish a homeowners association to increase affordable homeownership opportunities.

#### **Housing Affordability**

- **Program 13:** Countywide Affordable Rental Housing Development. This program provides financial and technical assistance to acquire sites, develop affordable rental housing, and acquire and rehabilitate affordable rental housing within specific geographic areas.
- **Program 14:** Priority Provision of Water and Sewer for Affordable Housing. This program requires public and private utility providers to grant priority to proposed housing developments that help meet the lower-income housing needs identified in the Housing Element.
- **Program 15:** Redevelopment Affordable Housing Requirements. This program applies to the Willowbrook, West Altadena, East Rancho Dominguez, Maravilla, and Whiteside Redevelopment Project Areas. Therefore, this program is not applicable to the proposed project.
- **Program 16:** Homebuyer Assistance. Under this program, the County offers financial assistance through down payment assistance loans, including closing cost assistance, federal income tax credits, and below market-rate loan programs.
- **Program 17:** Section 8 Rental Housing Assistance. This program provides rent subsidies to extremely low- and very low-income households with a housing cost burden, provides rental assistance to homeless families and individuals, and provides rental assistance to eligible homeless households that include a person who has HIV/AIDS.
- **Program 18:** Family Self-Sufficiency Program. This program provides opportunities for Section 8 recipients and public housing residents to engage in job training, personal development, and educational programs.
- **Program 19:** Housing Relocation for CalWORKs Participants. This program provides one-time-only assistance to qualified California Work Opportunities and Responsibility for Kids (CalWORKs) participants to ensure their success in obtaining/maintaining employment.
- **Program 20:** Shelter Plus Care – Supportive Housing Program. This program provides rental assistance for difficult-to-serve homeless persons with disabilities and develops supportive housing and services that allow homeless persons to live as independently as possible.
- **Program 21:** Green Building Program. This program aims to maximize the energy efficiency and improve the interior air quality of homes.

- **Program 22:** Energy Efficiency-Based Utility Allowance (EEBUA) Schedule. This program lowers utility rates to maintain affordability to tenants, ensure the financial strength during project operations, and recoup some of the initial cost of installation or upgrades.
- **Program 23:** Green Grant Program. This program provides grants up to \$20,000 for energy efficiency upgrades for low-income homeowners in unincorporated East Los Angeles. Therefore, this program is not applicable to the proposed project.

#### Neighborhood and Housing Preservation

- **Program 24:** Ownership Housing Rehabilitation Assistance. This program provides financial assistance for housing rehabilitation to preserve the County's existing stock of affordable housing.
- **Program 25:** Public Housing Modernization Program. This program subsidizes modernization activities including replacing roofs, landscaping sites, replacing windows, remodeling kitchens, and renovating to comply with the Americans with Disabilities Act.
- **Program 26:** Preservation of At-Risk Housing. Under this program, the County works to preserve affordable housing units at risk of converting to market-rate rents.

#### Equal Housing Opportunity

- **Program 27:** Fair Housing Programs. Under this program, the County contracts with a service provider to provide and coordinate fair housing services for residents.
- **Program 28:** Homeowner Fraud Prevention. This program prevents low- and moderate-income homeowners from becoming victims of fraud in the purchase of home improvements and repairs, as well as household goods and services, in the first and second supervisorial districts. Therefore, this program is not applicable to the proposed project.

#### Implementation and Monitoring

- **Program 29:** Coordination and Implementation. Under this program, an interdepartmental committee would explore affordable housing opportunities and help affordable housing developers navigate the County's regulatory system and financial incentives.
- **Program 30:** Annual Progress Report. Under this program, the County will monitor its utilization of residential land and its residential development approvals to ensure compliance with the state law.
- **Program 31:** Monitoring of Housing Issues. Under this program, the County will monitor legislation, trends, and policy issues related to the development and maintenance of affordable housing in Los Angeles County.

The above goals and programs are supported by multiple policies established in the Housing Element. **Policies 1.1 through 1.5** and **Policies 2.1 and 2.2** support the goal to ensure housing availability. Housing **Programs 1, 5, and 10** would ensure the availability of land for housing sites to meet the County's RHNA

allocation (**Policy 1.1**). Housing **Programs 2, 8, 11, 12, 27, and 29** would reduce government constraints to the provision and preservation of affordable housing (**Policy 1.2**). Housing **Programs 3, 10, and 13** would help the County coordinate with the private sector in the development of affordable housing (**Policy 1.3**). Housing **Programs 1, 4, 5, 7, 9, and 13** would allow the County to assist private developers in the identification and consolidation of suitable sites for affordable housing (**Policy 1.4**), and **Program 31** would oversee legislation and funding for programs that expand affordable housing opportunities (**Policy 1.5**). Housing **Programs 3, 6, 11, and 13** would encourage development of affordable housing near employment opportunities and within major commercial and transportation corridors (**Policy 2.1 and 2.2**).

- Policy 1.1:** Make available through land use planning and zoning an adequate inventory of vacant and underutilized sites to accommodate the County's RHNA.
- Policy 1.2:** Mitigate the impacts of governmental regulations and policies that constrain the provision and preservation of affordable housing and housing for persons with special needs.
- Policy 1.3:** Coordinate with the private sector in the development of affordable and special needs housing for both rental and homeownership. Where appropriate, promote such development through incentives.
- Policy 1.4:** Assist private nonprofit housing developers in identifying and consolidating suitable sites for developing housing for low-income households and other special needs groups.
- Policy 1.5:** Advocate legislation and funding for programs that expand affordable housing opportunities and support legislative changes to State housing programs to ensure that the criteria for the distribution of funds to local governments are based, in part, on the housing needs reflected in the RHNA.
- Policy 2.1:** Support the development of affordable housing near employment opportunities and/or within a reasonable distance of public transportation.
- Policy 2.2:** Encourage mixed use developments along major commercial and transportation corridors.

**Policies 3.1, 3.2, and 4.1** support the goal to ensure housing affordability. Housing **Programs 3, 4, 8, 10, 12, and 13** would help create mixed-income neighborhoods and a diversity of housing types (**Policy 3.1**). Housing **Programs 21, 22, 24, and 25** would facilitate the incorporation of energy and cost-saving technologies into housing design and operation (**Policy 3.2**). Finally, Housing **Programs 10, 11, 16, 17, 18, 19, and 20** would help provide financial assistance and other services to low- and moderate-income households and those with special housing needs, while maintaining affordable and adequate housing (**Policy 4.1**).

**Policy 3.1:** Promote mixed income neighborhoods and a diversity of housing types throughout the unincorporated areas to increase housing choices for all economic segments of the population.

**Policy 3.2:** Incorporate advances in energy-saving technologies into housing design, construction, operation, and maintenance.

**Policy 4.1:** Provide financial assistance and supportive services to assist low- and moderate-income households and those with special needs to attain and maintain affordable and adequate housing.

**Policies 5.1 through 5.3, 6.1 through 6.4, and 7.1** are designed to support neighborhood and housing preservation. **Programs 24, 25, and 26** would support neighborhood preservation programs and the maintenance of adequate neighborhood infrastructure and facilities (**Policies 5.1 and 5.2**). These three programs would also facilitate the allocation of resources to the maintenance and rehabilitation of existing housing, particularly affordable housing, and the inspection of low-cost housing to ensure that properties are being maintained (**Policies 6.1 through 6.3**). **Programs 14, 24, and 26** seek to maintain and improve community facilities and infrastructure to enhance the vitality of older, low-income neighborhoods (**Policy 6.4**). **Program 26** would help conserve existing affordable housing that is at risk of converting to market rent (**Policy 7.1**).

**Policy 5.1:** Support neighborhood preservation programs, such as graffiti abatement, abandoned or inoperative automobile removal, tree planting, and trash and debris removal.

**Policy 5.2:** Maintain adequate neighborhood infrastructure, sound community facilities, and services as a means of sustaining the overall livability of neighborhoods.



- Policy 5.3:** Enforce health, safety, building, and zoning laws directed at property maintenance as an ongoing function of the County government.
- Policy 6.1:** Invest public and private resources in the maintenance and rehabilitation of existing housing to prevent or reverse neighborhood deterioration.
- Policy 6.2:** Allocate Federal and State resources toward the preservation of residential units, particularly those that are affordable to extremely low-, very low-, and lower-income households.
- Policy 6.3:** Inspect multi-family rental housing (with five or more units), contract shelters, and voucher hotels on a regular basis by the appropriate County agencies to ensure that landlords are maintaining properties, and not allowing them to fall into disrepair.
- Policy 6.4:** Maintain and improve community facilities, public housing services, and infrastructure, where necessary, to enhance the vitality of older, low-income neighborhoods.
- Policy 7.1:** Conserve existing affordable housing stock that is at risk of converting to market-rate housing.
- Policy 7.2:** Preserve and, where feasible, provide additional affordable housing opportunities within the Coastal Zone (This policy is not applicable to the OVOV Planning Area and therefore is not discussed above).

**Policies 8.1 through 8.4** are intended to ensure equal housing opportunity. Housing **Programs 2, 10, 11, and 13** would support the distribution of affordable housing, emergency shelters, and traditional housing in areas with available services and facilities (**Policy 8.1**). Housing **Program 27** would enforce laws against illegal acts of housing discrimination and promote equal opportunity in housing and community development programs (**Policy 8.2 and 8.3**). Housing **Programs 2, 13, and 27** would encourage housing design to accommodate the special needs of seniors, large families, single-parent households, and low-income households (**Policy 8.4**). Finally, **Policies 9.1 and 9.2** address implementation and monitoring of housing programs. **Housing Programs 29, 30, and 31** would ensure collaboration among various County departments in the delivery of housing and related services (**Policy 9.1**), and would enhance the housing monitoring system to ensure compliance with funding program regulations and local, state, and federal laws (**Policy 9.2**).

- Policy 8.1:** Support the distribution of affordable housing, emergency shelters, and transitional housing in geographically diverse locations throughout the unincorporated areas, where appropriate support services and facilities are available in close proximity.
- Policy 8.2:** Enforce laws against illegal acts of housing discrimination. These include housing discrimination based on race, color, ancestry, national origin, sex, religion, sexual orientation, marital status, familial status, age, disability, source of income, or any arbitrary reason excluding persons from housing choice.
- Policy 8.3:** Promote equal opportunity in housing and community development programs Countywide.
- Policy 8.4:** Encourage housing design to accommodate the special needs of seniors, large families, single parent households, and low-income households. Designs may include units with three, four, or five bedrooms; shared facilities; on-site child care facilities; or on-site job training facilities.
- Policy 9.1:** Ensure collaboration among various County departments in the delivery of housing and related services.
- Policy 9.2:** Enforce and enhance the housing monitoring system to ensure compliance with funding program regulations and compliance with local, state, and federal laws.

### ***Effectiveness of Proposed Area Plan Policies***

The proposed policies are designed to preserve the County's functional housing stock while increasing and diversifying housing opportunities in the underutilized areas of the County's Planning Area. Although they do not explicitly mandate the protection of all existing housing units, they promote growth and development within underutilized commercial corridors and vacant areas where revitalization is desirable, rather than in established neighborhoods or on sites presently developed with housing. Furthermore, as discussed above, the multiple housing programs established by the adopted Countywide General Plan Housing Element would ensure the provision of adequate and affordable housing by identifying adequate sites for new development, providing various forms of financial assistance, improving the existing housing stock, preserving affordable units, removing certain development constraints, and enforcing fair housing practices. Since implementation of the proposed

Area Plan would not displace substantial numbers of existing housing, but would enhance housing opportunities within the County's Planning Area, impacts would be less than significant.

### **Plan to Plan Analysis**

Both the existing and proposed Area Plans encourage the upkeep and maintenance of existing housing stock and would enhance housing opportunities. Therefore, impacts would be similar.

### **Population Displacement**

**Impact 3.19-3                    Implementation of the proposed Area Plan would result in a potentially significant impact to the displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere.**

Buildout of the proposed Area Plan would increase the acreage of residential, commercial, and industrial land uses in the County's Planning Area. A significant impact would occur if the proposed Area Plan would allow the development of non-residential uses on sites currently occupied by permanent residents. Such actions could result in the displacement of substantial numbers of people and increase the demand for replacement housing elsewhere. However, as discussed under **Impact 3.19-2**, the proposed Area Plan contains policies designed to preserve the County's existing, utilized housing stock while increasing housing opportunities in the County's Planning Area. These policies promote growth and development within underutilized commercial corridors and vacant areas where revitalization is desirable, rather than in established neighborhoods or on sites presently developed with housing and occupied by permanent residents.

### ***Proposed Area Plan Policies***

See **Impact 3.19-2** for policies related to the preservation of existing housing.

### ***Effectiveness of Proposed Area Plan Policies***

See **Impact 3.19-2** for a discussion of the effectiveness of policies that would protect existing housing within the County's Planning Area. Since implementation of the proposed Area Plan would not displace substantial numbers of existing housing and, thus, not displace substantial numbers of people, impacts would be less than significant.

### **Plan to Plan Analysis**

Neither the existing nor the proposed Area Plan would displace substantial numbers of existing housing. Impacts would be similar under both plans.

### **MITIGATION FRAMEWORK**

No mitigation measures are required.

### **SIGNIFICANCE OF IMPACT WITH MITIGATION FRAMEWORK**

Potential impacts on population and housing due to implementation of the proposed Area Plan would be less than significant; no mitigation measures are required.